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Summary

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(57) [Abstract]
[Technical problem] Offer the game machine which performs the production display
which raised the degree of expectation to great success to the game person with
devising the display mode after a reach state.
[Means for Solution] When satisfying the change display start condition set up
beforehand, change presenting of identification information is started in two or more
viewing areas prepared into adjustable display, and a change display is stopped in
predetermined sequence after predetermined-time progress. In each identification
information which finally stops a change display, the identification information
stopped by other viewing areas and the identification information which has a
common common element in part are included. The identification information which
has a common element covers and displays arbitrary portions other than a common
element. When the identification information finally stopped is the identification
information which has a common element, a cover display is canceled gradually and
arbitrary portions other than a common element are displayed.

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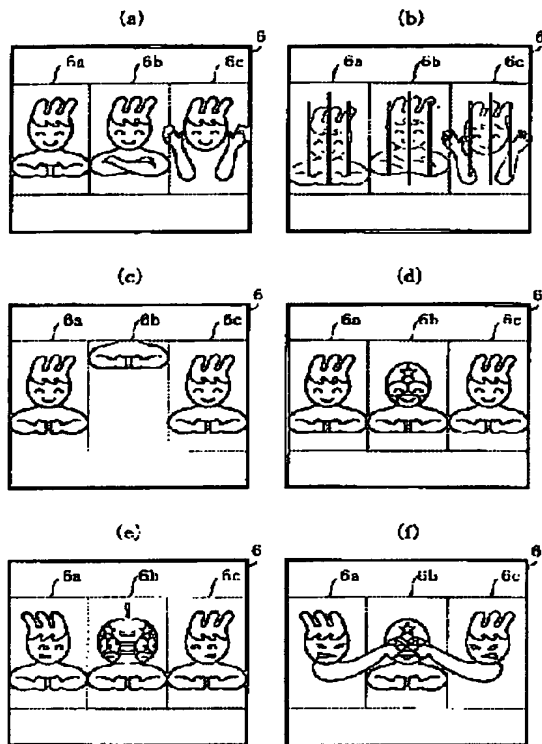
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CLAIMS

[Claim(s)]
[Claim 1] The game machine made to generate the specific game state which
becomes advantageous to a game person side on the occasion of a game when the
display result of the identification information which has the adjustable display from
which a display state can change, and is displayed on the adjustable display
concerned characterized by providing the following becomes the specific display
mode defin d beforehand A change display means to stop a change display after

predetermined-time progress while starting change presenting of identification information in two or more viewing areas prepared into the aforementioned adjustable display Include the identification information stopped by other viewing areas, and the identification information which has a common common element in part in each identification information which stops a change display by the aforementioned change display means. A partial cover display means to cover and display arbitrary portions other than the common element of the identification information which has the common element concerned, A cover release display means to cancel the cover display by the aforementioned partial cover display means, and to display arbitrary portions other than a common element when the identification information which covered the arbitrary portion by the aforementioned change display means stops and it is the identification information which has the same common element as other stopped identification information

[Claim 2] The aforementioned cover release display means is a game machine according to claim 1 characterized by displaying arbitrary portions other than a common element gradually by canceling gradually the cover display by the aforementioned partial cover display means.

[Claim 3] The aforementioned identification information is a game machine given in either of the claims 1 or 2 characterized by being the picture constituted by the combination of two or more parts pictures, and using a predetermined parts picture as a common element.

[Claim 4] The aforementioned partial cover display means is a game machine according to claim 1 to 3 characterized by covering and displaying arbitrary portions other than a common element by displaying a wrap cover object for the portion to arbitrary portions other than the common element of identification information.

[Claim 5] The aforementioned partial-occlusion display means is a game machine according to claim 1 to 3 characterized by covering and displaying arbitrary portions other than a common element by arranging and displaying a cover object on the front position to arbitrary portions other than the common element of identification information.

[Claim 6] The aforementioned partial-occlusion display means is a game machine according to claim 1 to 3 by which it is covered and displaying-arbitrary portions other than common element characterized by displaying the picture which shows the state where arbitrary portions other than the common element of identification information were beforehand covered by the cover object.

[Claim 7] The game machine characterized by providing the following A change display means to start change presenting of identification information in two or more viewing areas prepared into adjustable display, and to stop a change display after predetermined-time progress when the change display start condition set up beforehand is satisfied A re-change display means to classify into the group of a predetermined number each identification information which indicates by change by the aforementioned change display means, to resume change presenting of the

identification information of a predetermined viewing area when the identification
information of the predetermined viewing area which suspended the change display
is the identification information of the same group as the identification information
stopped by other viewing areas, and to stop a change display after predetermined-
time progress

[Claim 8] The aforementioned identification information is a game machine according
to claim 7 characterized by carrying out a group division for every character picture
which has the same color or the same configuration, or background image.

[Claim 9] The record medium which recorded the program for making a computer
perform cover release display processing which cancels gradually the cover display
by the aforementioned partial cover display processing, and displays arbitrary
portions other than a common element when it is the identification information
characterized by providing the following and in which computer reading is possible
Start condition distinction processing which distinguishes whether the change
display start condition set up beforehand is satisfied Change display processing
which stops a change display after predetermined-time progress while starting
change presenting of identification information in two or more viewing areas
prepared into adjustable display, when the change start condition was satisfied in
the aforementioned start condition distinction processing and it distinguishes Partial
cover display processing which covers and displays arbitrary portions other than the
common element of the identification information which is made to contain the
identification information stopped by other viewing areas, and the identification
information which has a common common element in part, and has the common
element concerned into each identification information which stops a change display
by the aforementioned change display processing The common element as other
stopped identification information with the same identification information which
covered the arbitrary portion which stopped by the aforementioned change display
processing

[Claim 10] The production display-control method characterized by providing the
following The change display procedure of starting change presenting of
identification information in two or more viewing areas prepared into adjustable
display, and stopping a change display after predetermined-time progress when it
distinguished whether the change display start condition set up beforehand having
been satisfied, consequently the change start condition was satisfied and it
distinguishes The partial cover display procedure which covers and displays arbitrary
portions other than the common element of the identification information which is
made to contain the identification information stopped by other viewing areas, and
the identification information which has a common common element in part, and has
the common element concerned into each identification information which stops a
change display with a change display procedure The cover release display procedure
which cancels gradually the cover display by the partial cover display procedure, and
displays arbitrary portions other than a common element when the identification

information which covered the arbitrary portion which stopped with the change display procedure is the identification information which has the same common element as other stopped identification information The specific game state generating procedure of generating the specific game state where the last display mode of identification information becomes advantageous to a game person side on the occasion of a game by the display mode and bird clapper of the specification defined beforehand

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DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[The technical field to which invention belongs] this invention relates to game machines, such as a pachinko game machine, and relates to the game machine, storage, and the production display—control method of having the adjustable display function which indicates the predetermined identification information by change especially.
[0002] In game machines, such as a pachinko game machine, many things which raised game interest by the so—called adjustable display game which indicates the predetermined identification information (henceforth, indicator—chart handle) by adjustable on various display, such as 7 segment light emitting diode (following, Light Emitting Diode:Light Emitting Diode) drop, Light Emitting Diode matrix display equipment which consists of two or more Light Emitting Diodes, a liquid crystal display (following, LCD:Liquid Crystal Display), and cathode—ray tube (following, CRT:Cathode Ray Tube) display, are offered in recent years [[background of invention]].
[0003] There are what is performed by usually using the display mentioned above as pattern display (henceforth, normal pattern game), and a thing (following and ** view game) to perform by using display as pattern display specially in an adjustable

display game. a normal pattern — a game — and — ** — a view — a game — both
— a game — a sphere — winning a prize — following — an indicator chart — a
handle — change — a display — a predetermined time — a deed — an indicator
chart — a handle — change — a display — having stopped — the time — a halt —
a pattern — a mode — specification — a display — a mode — becoming — **** –
– a case — ″— per — ″ — ** — carrying out — a game — it

[0004] If it becomes ″a hit″ (henceforth, small hit) in a normal pattern game, by
usually exciting the solenoid for electric accessories, an electric accessory will
usually be made into an open state, and fixed time offer of the state where it is
called an electric tulip type accessory or a mini attacker and where winning a prize
of a game sphere becomes easy to a game person will be made. On the other hand,
if it becomes ″a hit″ (following, great success) in a ** view game, by exciting the
solenoid for electric accessories specially, the special electric accessory called a
large winning-a-prize mouth or attacker will be made into an open state, and the
state where winning a prize of a game sphere becomes very easy to a game person
will be offered continuously fixed time.

[0005] Here, in a ** view game, it is becoming it a great success, and an electric
accessory calls specially the state where very becomes easy [winning a prize of a
game sphere] to a game person, and a bird clapper a specific game state, by the
open state and the bird clapper. It becomes conditions in order to be in a specific
game state, (generally an indicator-chart handle be equal to a specific display mode
and bird clapper as which the halt pattern mode of the indicator-chart handle
specially displayed on pattern display was usually determined beforehand in the
same pattern).

[0006] Thus, the biggest interest will be paid to whether it becomes the display
mode of specification [a normal pattern game and a ** view game / a halt pattern
mode], and becomes ″a hit″ for a game person. There are usually so many
especially acquisition awarded balls in a ** view game that it does not become as
compared with the case of a normal pattern game. For this reason, in the game
machine which performs a ** view game, in order to raise game interest, there are
some which perform various production displays, until a halt pattern mode is decided
based on the game result determined beforehand.

[0007] And in process until all indicator-chart handles suspend a change display
completely, the further production display for making the hope which is becoming it
a great success continue as much as possible is demanded in the case of the
production display in recently.

[0008]
[Description of the Prior Art] Conventionally, as a game machine which performs a
** view game, there is a pachinko game machine (the following and 1st sort pachinko
game machine) which has the 1st sort of an electric accessory specially, for example.
The 1st sort pachinko game machine performs, when the game sphere discharged all
over the game field wins a prize of the winning-a-prize mouth called 1st-sort

starting mouth (start CHAKKA), extraction, i.e., the great success lottery, of a random number value, and it determines the production display and halt pattern mode in a ** view game based on the extracted random number value.

[0009] As a typical production display in a ** view game, there is a reach production display, for example. All patterns other than the indicator-chart handle used as the last halt pattern are in the state which suspended the change display, and a reach production display shows the thing of the production display performed in the state (henceforth, reach state) where indicator-chart handles other than the last halt pattern are in agreement with the specific halt pattern mode which is becoming it a great success.

[0010] For example, when the indicator-chart handle arranged at three longitudinal directions stops like a left figure handle, an inside pattern, and a right figure handle in order of a left figure handle, a right figure handle, and an inside pattern and all of these indicator-charts handle gather in the same pattern, it shall be becoming it a great success. At this time, the case where the left figure handles and right figure handles other than a pattern stop in the same pattern while being the last halt pattern is called reach state. It is that a normal state makes the change display pattern of an inside pattern a different change display pattern when it comes to a reach state, and what was constituted so that game interest might be enlivened is common.

[0011] Especially, in the pachinko game machine in recently, what prepared two or more kinds of change display patterns of the indicator-chart handle in a reach state is becoming common. That is, the change display by arbitrary reach patterns is performed by performing alternatively either of the prepared change display patterns based on the random number value established beforehand. By this, the degree of expectation to great success could be set up for every reach pattern, respectively, and it was contributing to improvement in the game interest in the 1st sort pachinko game machine.

[0012]
[Problem(s) to be Solved by the Invention] However, since it had become the composition for which whether it is great success opts when the last halt pattern stopped if it was in the game machine represented by such 1st sort pachinko game machine, there was a trouble which is described below. That is, when it stops with a different indicator-chart handle from the left figure handle and right figure handle from which a pattern turns into other halt patterns while becoming the last halt pattern, after being in a reach state, the hope which is becoming it a great success at the time will be severed.

[0013] Even if the halt pattern mode at the time of turning off the change display of the last halt pattern to such a trouble is the case where it once stops in combination other than a specific combination which is becoming it a great success, the game machine elaborated in the device for making the hope which is becoming it a great success continue because it is made to perform a change display (following

and re-change display) again is also. However, although the continuation effect of the hope which is becoming it a great success by performing a change display was accepted, the effect which raises the degree of expectation which serves as great success from a re-change display was thin.

[0014] [Objects of the Invention], then this invention are devising the display mode after a reach state, and aim at offering the game machine which performs the production display which raised the degree of expectation to great success to a game person.

[0015]

[Means for Solving the Problem] In order to attain the above-mentioned purpose, the game machine concerning the first viewpoint of this invention When the display result of the identification information which has the adjustable display from which a display state can change, and is displayed on the adjustable display concerned becomes the specific display mode defined beforehand, While being the game machine made to generate the specific game state which becomes advantageous to a game person side on the occasion of a game and starting change presenting of identification information in two or more viewing areas prepared into adjustable display In each identification information which stops a change display by change display means to stop a change display after predetermined-time progress, and the change display means A partial cover display means to cover and display arbitrary portions other than the common element of the identification information which is made to contain the identification information stopped by other viewing areas, and the identification information which has a common common element in part, and has the common element concerned, In the ** case which is the identification information which has the common element same when the identification information which covered the arbitrary portion by the change display means stops as other stopped identification information The cover display by the partial cover display means is canceled, and it constitutes so that it may have a cover release display means to display arbitrary portions other than a common element.

[0016] According to this, like a pinball machine, when the identification information finally stopped by the change display means in the game machine using a game sphere is the identification information which has a common element, arbitrary portions other than the common element by which it was indicated by cover are canceled and displayed by the cover release display means, for example. Thus, when the identification information finally stopped has other stopped identification information and common elements, the degree of similar of each identification information is high naturally. Namely, the more the coincidence state of identification information becomes high, the more as for the game person who has got used to the common game machine which makes it the conditions of great success for each identification information to be in agreement, the degree of expectation to great success will be raised to inside free from not knowing.

[0017] And the game machine concerning the second viewpoint of this invention A

change display means to start change presenting of identification information in two or more viewing areas prepared into adjustable display, and to stop a change display in predetermined sequence after predetermined-time progress when the change display start condition set up beforehand is satisfied, In each identification information which finally stops a change display by the change display means A partial-occlusion display means to cover and display arbitrary portions other than the common element of the identification information which is made to contain the identification information stopped by other viewing areas, and the identification information which has a common common element in part, and has the common element concerned, A common element distinction means to distinguish whether it is the identification information which has the common element as other identification information stopped previously with the same identification information finally stopped by the change display means, When the identification information finally stopped has a common element as a result of distinction by the common element distinction means, the cover display by the partial-occlusion display means is canceled, and it constitutes so that it may have a cover release display means to display arbitrary portions other than a common element.

[0018] Even when this invention is applied to a game machine not only like a game machine like a pinball machine but game equipment according to this Like the game machine concerning the first viewpoint mentioned above, when the identification information finally stopped is the identification information which has a common element, the degree of expectation to great success can be raised to a game person by canceling and displaying arbitrary portions other than the common element by which it was indicated by cover.

[0019] In addition, it adds to the game machine concerning the first and the second viewpoint which were mentioned above, and, as for a cover release display means, it is effective to cancel gradually the cover display by the partial-occlusion display means, and to display arbitrary portions other than a common element gradually. By this, arbitrary portions other than a common element can be displayed little by little gradually, and the degree of expectation to great success can be gradually raised to a game person.

[0020] Moreover, identification information is made into the picture constituted by the combination of two or more parts pictures, and it is desirable among the parts picture of these plurality to constitute so that a predetermined parts picture may be used as a common element. Specifically, like a composite picture, two or more parts pictures constitute a person's face, and by using hair, an eye, a nose, a mouth, or a mustache as a common element, when a common element is contained in a part of identification information finally stopped, it can advance to the production display of the following stage with a hope.

[0021] Moreover, a partial-occlusion display means can consider covering and displaying arbitrary portions other than a common element by displaying a wrap cover object for the portion, arranging and displaying a cover object on the front

face, or displaying the picture which shows the state where arbitrary portions other than the common element of identification information were beforehand covered by the cover object to arbitrary portions other than the common element of identification information. That is, the optimal display gestalt for hardware resources can be chosen by taking various display gestalten into consideration about the technique of a cover display.

[0022] And the game machine concerning the third viewpoint of this invention A change display means to start change presenting of identification information in two or more viewing areas prepared into adjustable display, and to stop a change display after predetermined-time progress when the change display start condition set up beforehand is satisfied, Each identification information which indicates by change by the change display means is classified into the group of a predetermined number. When the identification information of the predetermined viewing area which suspended the change display is the identification information of the same group as the identification information stopped by other viewing areas, change presenting of the identification information which finally suspended the change display is resumed, and it constitutes so that it may have a re-change display means to stop a change display after time progress.

[0023] When the identification information finally stopped by the change display means is the identification information belonging to the same group according to this, change presenting of identification information is continued by re-change display. Thus, when the identification information finally stopped is the same group as the identification information which others stopped, the degree of community of similar by group conditions, i.e., the degree, becomes high between each identification information. Namely, the more the coincidence state of identification information becomes high, the more as for the game person who has got used to the common game machine which makes it the conditions of great success for each identification information to be in agreement, the degree of expectation to great success will be raised to inside free from not knowing.

[0024] In addition, it adds to the game machine concerning the third viewpoint mentioned above, and the thing which have every character picture which has the same color or the same configuration for identification information, the same color, or the same configuration and which is done for a group division for every background image can be considered. The degree of similar between the identification information belonging to the same group is raised by this, and the degree of expectation to great success can be raised to a game person.

[0025] Moreover, the record medium concerning the fourth viewpoint of this invention The start condition distinction processing which distinguishes whether the change display start condition set up beforehand is satisfied, When the change start condition was satisfied in start condition distinction processing and it distinguishes, while starting change presenting of identification information in two or more viewing areas prepared into adjustable display In each identification information which stops

a change display by change display processing which stops a change display after predetermined-time progress, and change display processing Partial-occlusion display processing which covers and displays arbitrary portions other than the common element of the identification information which is made to contain the identification information stopped by other viewing areas, and the identification information which has a common common element in part, and has the common element concerned, When it is the identification information which has the common element as other stopped identification information with the same identification information which covered the arbitrary portion which stopped by change display processing, The cover display by partial-occlusion display processing is canceled gradually, and the program for making a computer perform cover release display processing which displays arbitrary portions other than a common element is recorded.

[0026] That is, the program included in a record medium can be made to be able to read into a computer apparatus (for game equipment to be included) etc., and the game machine of this invention can be easily realized by performing a series of processings. That is, with equipment, production, sale, distribution, etc. can be easily performed in the form where it became independent, as software goods by taking the gestalt of the record medium which recorded the program. Moreover, production display technology in this invention can be easily carried out by building this software into hardware, such as a computer apparatus (game equipment being included).

[0027] Furthermore, the production display-control method concerning the fifth viewpoint of this invention It distinguishes whether the change display start condition set up beforehand is satisfied. Consequently, the change display procedure of starting change presenting of identification information in two or more viewing areas prepared into adjustable display, and stopping a change display after predetermined-time progress when the change start condition was satisfied and it distinguishes, Include the identification information stopped by other viewing areas, and the identification information which has a common common element in part in each identification information which stops a change display with a change display procedure. The partial-occlusion display procedure which covers and displays arbitrary portions other than the common element of the identification information which has the common element concerned, When it is the identification information which has the common element as other stopped identification information with the same identification information which covered the arbitrary portion which stopped with the change display procedure, By the specific display mode and specific bird clapper to which the last display mode of identification information was beforehand determined as the cover release display procedure which cancels gradually the cover display by the partial-occlusion display procedure, and displays arbitrary portions other than a common element The specific game state generating procedure of generating the specific game state which becomes advantageous to a

game person side on the occasion of a game is included.

[0028] That is, the same effect as the game machine of this invention can be acquired by making a computer apparatus (game equipment being included) etc. perform the procedure by the above-mentioned method. That is, production display technology in this invention can be easily carried out on the hardware concerned by realizing the above-mentioned procedure using hardware, such as a computer apparatus (game equipment being included).

[0029] Moreover, while transmitting as a program code signal on which the program or data for making a computer apparatus (game equipment being included) etc. perform the procedure by the above-mentioned method was encoded, and the subcarrier was overlapped Production display technology in this invention can be easily carried out by receiving the program code signal on which this subcarrier was overlapped, decrypting to an original program or original data, and performing a computer apparatus (game equipment being included) etc.

[0030]

[Embodiments of the Invention] Hereafter, 1 operation form of this invention is explained in detail, referring to a drawing. In addition, the state where it is shaken and displayed besides the state where the specific pattern is displayed as "a halt" of an indicator-chart handle fixed in the following explanation is also included. That is, the state where the specific pattern is continuously displayed between 1 commuter's tickets in a predetermined viewing area is said.

[0031] (The 1st example) Although a prepaid card takes and explains the 1st sort pachinko game machine of the card reader (CR:Card Reader) formula which performs a sphere loan to an example as a game machine in this example, as a game machine used as the candidate for application, it does not restrict to this. For example, you may be the pachinko game machine (the 3rd sort pachinko game machine) which has the 3rd sort of an electric accessory specially, a general **** machine, or the pachinko game machine with a probability setting up function called contest a party.

[0032] Moreover, you may be the pachinko game machine (henceforth, cash machine) which performs a sphere loan as a game machine used as the candidate for application not only with CR formula pachinko game machine (henceforth, CR machine) which performs a sphere loan with a prepaid card but with cash. That is, as long as it is the pinball machine which has the special pattern display which consists of LCD or a CRT display, and performs a ** view game, you may be the thing of what form.

[0033] Drawing 1 is the front view of the pachinko game machine in the 1st example, and shows the arrangement layout of a primary member. The pachinko game machine (game machine) 1 is divided roughly, and consists of the game board (gage board) 10 which constitutes the game face of a board, and a frame 30 for game machines (underframe) which carries out support fixation of the game board 10. The game field 13 of the simultaneously circle configuration surrounded by the guide rail which consists of an inner rail 11 and an outside rail 12 is formed in the game board

10.

[0034] In order that the game sphere discharged all over the game field 13 may prevent returning to a discharge path in the game field 13, the foul sphere stop 14 is formed in the nose-of-cam position of the inner rail 11. Moreover, it returns to the upper right position of the outside rail 12, and rubber 15 is formed so that the game sphere discharged all over the game field 13 may not say the right-hand side of the game field 13 as it is.

[0035] The game interest in the pachinko game machine 1 is mostly raised by the ** view game of the game field 13 which the pattern display 6 is arranged specially and is specially carried out to a mid gear with the pattern display 6. Specially, the pattern display 6 is constituted by active-matrix type LCD by TFT (Thin Film Transistor), and displays the background image accompanying a ** view game, a character picture, a change pattern, etc.

[0036] 12 indicator-chart handles specially corresponding to the number to "1" – "12" as a pattern of the pachinko game machine in this example and three indicator-chart handles used when it changes into a specific reach state are prepared. Specifically the indicator-chart handle of this example specially used as a pattern The face picture which carried out the picture (henceforth, face picture) and mask which show the face of four kinds of characters from which a hairstyle differs, respectively, By combining the picture (henceforth, arm picture) which shows the arm of three kinds of characters with which the position and state of a hand differ from each other, respectively, the indicator-chart handle which consists of a character picture of a total of 15 (=(4+1) x3) individuals is acquired.

[0037] Moreover, into the viewing area of the pattern display 6, three special pattern viewing areas 6a, 6b, and 6c for displaying a "special pattern left figure handle", "the pattern in a special pattern", and a "special pattern right figure handle" are formed specially. In addition, it is possible to replace by the display not only using LCD in this example but a CRT display, FED (Field Emission Display), PDP (Plasma Display Panel) and EL (Electro Luminescence), a fluorescent display, or Light Emitting Diode as pattern display 6 specially.

[0038] The special pattern starting mouth (start CHAKKA) 5 which makes the electric tulip type accessory (usually electric accessory) 4 serve a double purpose, and the large winning-a-prize mouth (the 1st sort specially electric accessory) 7 which performs open operation by driving a solenoid etc. at the time of great success generating are specially arranged in the lower part position of the pattern display 6 in order. The large winning-a-prize mouth 7 performs open operation for about 29.5 seconds for large winning-a-prize **** 8 per time, when it is becoming it a great success, as a result of performing a ** view game based on the winning-a-prize timing to the pattern starting mouth 5 specially.

[0039] This open operation is performed continuously a maximum of 15 times a condition [a game sphere passing through the specific field 9 in the larg winning-a-prize mouth 7]. By this, the opportunity of awarded-balls acquisition of many by the

game (bonus game) is specially given to a game person. In addition, when ten game spheres win a prize in general in the large winning-a-prize mouth 7, even if a released time is less than about 29.5 seconds, open operation of the large winning-a-prize mouth 7 stops.

[0040] The ** view hold storage displays 5a-5d to the pattern starting mouth 5 which display the storage state of winning a prize are specially arranged by the lower part of the pattern display 6. The ** view hold storage displays 5a-5d report the present winning-a-prize storage state to the pattern starting mouth 5 outside specially by making light emit one by one, whenever a game sphere wins specially a prize of the pattern starting mouth 5, and making the light put out one by one at the time of a ** view game start.

[0041] Moreover, the warp roots 17L and 17R which lead a game sphere to the stage 16 in which it was prepared specially in the upper part position of the pattern starting mouth 5 are specially formed in the right-and-left flank of the pattern display 6. The pattern starting gate (gate CHAKKA) 2 is usually established in the game sphere passage mouth position of left-hand side warp root 17L, and the pattern display 3 is usually specially arranged in the upper part position of the pattern display 6. The pattern display 3 is constituted by the 7 segment Light Emitting Diode, and usually displays the change pattern accompanying a normal pattern game etc. in pattern viewing-area 3a. the pachinko game machine in this example -- as a pattern, six indicator-chart handles, "0", "1", "3", "5", "7", and "9", are usually prepared

[0042] The normal pattern hold storage displays 2a-2d which usually display the storage state of the passage sphere to the pattern starting gate 2 are usually specially arranged in the position near the right and left of the pattern display 3 like the case of a pattern. Whenever a game sphere usually passes through the pattern starting gate 2, in case the normal pattern hold storage displays 2a-2d are made to emit light one by one and usually start the change display of a pattern like the ** view hold storage displays 5a-5d, they usually report the present passage storage state to the pattern starting gate 2 outside by making the light put out one by one.

[0043] The heavens winning-a-prize mouth 21 is usually formed in the upper part position of the pattern display 3, the sleeve winning-a-prize mouths 22L and 22R drop on the right-and-left position of the large winning-a-prize mouth 7 again, and the winning-a-prize mouths 23L and 23R are formed in the right-and-left position of a stage 16, respectively. furthermore -- usually -- the right-and-left position of the pattern display 3 -- wind mills 24L and 24R -- moreover, between the pattern display 6 and the sleeve winning-a-prize mouths 22L and 22R, wind mills 25L and 25R are arranged specially And in order to collect the game spheres which the side lamps 26L and 26R were arranged in the right-and-left position of the game field 13, and did not win a prize of the lower part position of the large winning-a-prize mouth 7, the out mouth 28 is formed in the out mouth trim 27.

[0044] The frame 30 for game machines is divided roughly, and consists of a seating

rim 31, a plastic frame 32, and an outer frame 33. The seating rim 31 is attached in the outer frame 33 through Hinges 34a and 34b, can be ahead opened by opening the cylinder lock 40 mentioned later, and can operate now the rear—face side of the game face of a board. The game effect Light Emitting Diode 35 turned on during great success operation and the game effect lamp 36 which blinks in the reach state etc. are formed in the upper part position and the periphery section of a seating rim 31. The awarded—balls Light Emitting Diode group 37 turned on at the time of awarded balls and the sphere piece Light Emitting Diode group 38 turned on at the time of a sphere piece are formed in the upper left section position in the plastic frame 32. Moreover, the sphere omission hole 39 is established in the left—hand side of the plastic frame 32 in a seating rim 31, and cylinder lock 40 is formed in the right—hand side of the plastic frame 32 in a seating rim 31.

[0045] The upper saucer unit 41 is attached in the lower position of the plastic frame 32, and the lower saucer unit 51 is attached in it under the upper saucer unit 41. The upper saucer unit 41 is for supplying the game sphere which should be discharged all over the game field 13 to a launcher 55, and it is constituted so that the constant—rate reservoir of the ball on hire from a ball rental machine and the reward balls by awarded balls can be carried out. For this reason, while the sphere exhaust port 43 and the flowing upper saucer 44 are formed on the main part 42 of a saucer, the saucer top section 47 for carrying out ball rental and arranging a button 45 and the return button 46 is formed in the upper saucer unit 41. Moreover, the upper **** omission lever 48 for pouring the game sphere stored in the upper saucer 44 to the lower saucer unit 51 side is formed in the upper right position of the saucer top section 47, and the buzzer 49 is formed in the lower mid gear of the main part 42 of a saucer.

[0046] On the other hand, the lower saucer 52 for storing reward balls, such as awarded balls, the lower **** omission lever 53 for dropping the game sphere in the lower saucer 52 in a reward—balls case (cashbox), and the ash pan 54 are formed in the lower saucer unit 51 in one. Moreover, the launcher handle 56 for operating the launcher 55 for operating discharge of a game sphere on the right—hand side of the lower saucer unit 51 is formed, and the weight button 58 which projects by rotating the launcher lever 57 is formed in the portion located in the lower left of the launcher handle 56.

[0047] If the weight button 58 can stop printing of a game sphere immediately and press is canceled by pressing to the midst which operates the launcher lever 57 and is hammering out the game sphere from the launcher 55, it will resume printing. Furthermore, the stereo loudspeakers 61L and 61R which carry out the reproduction output of the sound effect are formed in the right—and—left up position of the game board 10.

[0048] The prepaid card unit 900 is arranged on the left—hand side of the pachinko game machine 1. There must not be the prepaid card unit 900, in order that CR machine may operate, and the card use good lamp 901, the amount—of—money setup

key 902, the loaned money frame display 903, the fraction display switch 904, the direction display 905 of a connection base, the card insertion lamp 906, the card slot 907, and the card unit lock 908 are formed in the front face.

[0049] Drawing 2 is the rear view of the pachinko game machine in the 1st example, and shows the arrangement layout of a primary member. The tooth back of the pachinko game machine 1 is equipped with the game control section (game control board) 200 which mentions a detail later, the display-control section (display-control substrate) 500, the voice-control section (electric-spectaculars control board) 600, the awarded-balls control section (awarded-balls substrate) 700, and the information output section (information terminal substrate) 800. Moreover, the game machine connection connector 909 and the JBOX connection connector 910 are formed in the tooth back of the prepaid card unit 900.

[0050] Specially, the game sphere discharged in the game field 13 from the launcher 55 is winning specially a prize of the pattern starting mouth 5, and the ** view game in the pattern display 6 starts the change display of each indicator-chart handle of a "special pattern left figure handle", "the pattern in a special pattern", and a "special pattern right figure handle" specially displayed on the pattern viewing areas 6a, 6b, and 6c, respectively. After starting a change display, change is stopped after predetermined-time (5 seconds or more) progress in order of a "special pattern left figure handle", a "special pattern right figure handle", and "the pattern in a special pattern", respectively. The halt pattern mode at the time of a change halt considers the case where it becomes 3 sets with the same indicator-chart handle as great success, and opens the large winning-a-prize mouth 7 for about 29.5 seconds so that a detail may be mentioned later. Such a great success determination, a determination of a halt pattern, etc. are made based on the random number generated by the game control section 200 mentioned later, it is incorporating the probable element accompanied by the contingency in a ** view game, and the interest over a pachinko game is enlivened.

[0051] Drawing 3 is the block diagram showing the example of a system configuration in a game control section. The pachinko game machine 1 in this example is mainly equipped with a power supply section 100, the game control section (game control board) 200, the input switch group 300, the output solenoid group 400, the display-control section (display-control substrate) 500, the voice-control section (electric-spectaculars control board) 600, the awarded-balls control section (awarded-balls substrate) 700, and the information output section (information terminal base) 800.

[0052] It connects by the signal line, respectively, and the game control section 200, and each of other functional block 300, i.e., an input switch group, the output solenoid group 400, the display-control section 500, the voice-control section 600, the awarded-balls control section 700 and the information output section 800 are constituted so that control command, data, etc. can be delivered and received between the game control sections 200.

[0053] In addition, in this invention, the function which each means of a change display means, a partial-occlusion display means, a common element distinction means, and a cover release display means has is mainly realized by the game control section 200 and the display-control section 500.

[0054] The power supply section 100 consists of a fuse circuit 101 and a power circuit 102. The fuse circuit 101 is a protection network for preventing that the current exceeding the rated current flows to a power circuit 102. The alternating current supplied from the source 99 of alternating current is changed into predetermined voltage after rectifying to a direct current, and a power circuit 102 supplies it to each circuit in the pachinko game machine 1. In addition, the source 99 of alternating current changes and supplies the high-pressure alternating current acquired from a general source power supply to 24-volt alternating current.

[0055] The direct current voltage of 21 volts of direct current for specifically supplying the direct current voltage of 30 volts of direct current for driving high-pressure devices, such as various solenoids and a lamp, through a signal line 151, and supplying various displays through a signal line 152 is supplied. Moreover, the direct current voltage of 5 volts of direct current for supplying the direct current voltage of 12 volts of direct current for driving various switches through a signal line 153, and supplying various logical circuits through a signal line 154 is supplied. Furthermore, the direct current voltage of L volts of direct current (voltage for a LCD drive) is supplied to LCD which constitutes the pattern display 13 specially through a signal line 155.

[0056] The game control section 200 consists of various circuits prepared in the game control board. The initial reset circuit 201, The fixed reset circuit 202 and MCU203 for game control called security one chip (Micro Controller Unit), The address decoding circuit 204, I/O Port 205, and the switch input circuit 206, With the solenoid drive circuit 207, it has the pattern display circuit 208, the Light Emitting Diode drive circuit 209, the sound output circuit 210, the electric-spectaculars signal circuit 211, the winning-a-prize data signal input circuit 212, the awarded-balls number signal output circuit 213, and the information output circuit 214 specially.

[0057] The function which generates the uniform random number which uses the game control section 200 in a normal pattern game and a ** view game, As opposed to the management equipment of the function to perform the flicker display of a lamp and Light Emitting Diode, and a pachinko hole (game store) It has the function which outputs the existence under generating of the great success in the number of winning a prize to the pattern starting mouth 14, the number-of-times number of effective starting of ** view games, and a ** view game, the number of times of round continuation at the time of great success, probability change, or time shortening operation, the injustice by winning a prize, and which various unjust information by the omission of a connector specially.

[0058] The initial reset circuit 201 outputs the initial reset signal for resetting

MCU203 for game control to the power up of the pachinko game machine 1 through a signal line 251. The fixed reset circuit 202 generates a fixed reset signal every about 2 mses by carrying out dividing of the reference clock signal outputted from an internal clock oscillator, and outputs it to MCU203 for game control through a signal line 252. CPU221 performs again the program for [whenever a fixed reset signal is inputted] game control from a head.

[0059] MCU203 for game control is the so-called single chip microcomputer which formed ROM (Read Only Memory)222 and RAM (Random Access Memory)223 into 1 chip by using 8-bit CPU (Central Processing Unit)221 as a core, and makes the control center in the game control section 200 of the pachinko game machine 1.

[0060] CPU221 performs time-sharing processing by reset interruption based on the fixed reset signal inputted every about 2 mses from the fixed reset circuit 202. ROM222 is semiconductor memory which stores various control programs, data, etc. which are used by MCU203 for game control. The one time ROM which cannot newly rewrite the content of the program written in at once for the security measure, data, etc. is used for ROM222.

[0061] RAM223 is semiconductor memory which memorizes temporarily the data relevant to a game in storing the program data used during the program processing execution in MCU203 for game control ****, or is used as a working area. The predetermined storage region usually based on the passage sphere to the pattern starting gate 2 which usually memorizes the lottery value of the random number for a pattern judging one by one to four in case a normal pattern game is performed in RAM223 (usually bank for a pattern judging), In case a ** view game is performed, the predetermined storage region (specially bank for a pattern judging) which memorizes the lottery value of the random number for a special pattern judging based on the winning-a-prize sphere to the pattern starting mouth 5 one by one to four specially is prepared.

[0062] When a lottery value is usually memorized on the bank for a pattern judging, usually update a pattern passage storage counter, the normal pattern hold storage displays 2a-2d corresponding to a pattern passage storage counter are made to usually turn on, and the storage state of pattern display storage (normal pattern hold memory) is usually shown. On the other hand, when a lottery value is memorized specially on the bank for a pattern judging, update a pattern winning-a-prize storage counter specially, the ** view hold storage displays 5a-5d corresponding to a pattern winning-a-prize storage counter are made to turn on specially, and the storage state of pattern display storage (** view hold memory) is shown specially.

[0063] MCU203 for game control performs various program processings per 1 sequence, performing writing or reading of data to RAM223 at any time according to the program procedure read from ROM222. Specifically, through I/O Port 205, the signal from various sensors etc. formed in the game face of a board is incorporated, and required processing is performed based on the incorporated signal. And when you need the random number used for a normal pattern game and a ** view game, it

also has the function which generates a random number value by the counter of the beam riser method mentioned later.

[0064] The address decoding circuit 204 inputs and decodes the address signal outputted through a signal line 253 from MCU203 for game control. As a result of decoding, the controlled system of MCU203 for game control outputs the signal for choosing any [ROM222 and RAM223 which are contained in MCU203 for game control, or] of I/O Port 205 they are MCU203 for game control through a signal line 254.

[0065] I/O Port 205 is the interface of the various I/O signals treated by MCU203 for game control, outputs outside the control signal inputted through a signal line 255, or outputs the various signals inputted from the outside to MCU203 for game control through a signal line 255. A signal line 257 is minded [205]. for this reason, the switch input circuit 206 The solenoid drive circuit 207 minds a signal line 260 through a signal line 258. specially the pattern display circuit 208 The Light Emitting Diode drive circuit 209 minds a signal line 268 through a signal line 262,264,266. the sound output circuit 210 The information output circuit 214 is connected [the electric-spectaculars signal circuit 211 / the winning-a-prize data signal input circuit] for the awarded-balls number signal output circuit 213 through the signal line 276 through the signal line 274 through the signal line 273, respectively through the signal line 270.

[0066] The input signal inputted from the input switch group 300 through a signal line 256 is amplified by the buffer gate etc., and the switch input circuit 206 outputs it to I/O Port 205 through a signal line 257, after operating orthopedically as a pulse wave through a low pass filter etc. The solenoid drive circuit 207 outputs a drive control signal (excitation control signal) to the output solenoid group 400 through a signal line 259 based on the input signal inputted from I/O Port 205 through a signal line 258.

[0067] The pattern display circuit 208 outputs a command, a display timing signal, etc. from MCU203 for game control to the display-control section 500 through a signal line 261 based on the input signal inputted from I/O Port 205 through a signal line 260 specially. The Light Emitting Diode drive circuit 209 outputs the control signal which controls flicker operation of the ** view hold storage displays 5a-5d through a signal line 263 based on the input signal inputted from I/O Port 205 through a signal line 262,264,266. Moreover, the control signal which usually drives the pattern display 3 through a signal line 265 is outputted. Furthermore, the control signal which controls flicker operation of the normal pattern hold storage displays 2a-2d through a signal line 267 is outputted.

[0068] When a lottery value is memorized specially on the bank for a pattern judging, the ** view hold storage displays 5a-5d corresponding to the bank for a pattern judging are made to specifically turn on specially with the control signal of RAM223 outputted through a signal line 263. And an input of the signal of the purport that passage of a game sphere was usually detected at the pattern starting gate 2 from

the switch input circuit 206 usually outputs the control signal of pattern change to the pattern display 3 through a signal line 265. Moreover, when a lottery value is usually memorized on the bank for a pattern judging, the normal pattern hold storage displays 2a-2d corresponding to the bank for a pattern judging are made to usually turn on with the control signal of RAM223 outputted through a signal line 267.

[0069] The sound output circuit 210 outputs the sound data from MCU203 for game control etc. to the voice-control section 600 through a signal line 269 based on the input signal inputted from I/O Port 205 through a signal line 268. The electric-spectaculars signal circuit 211 outputs electric-spectaculars control command etc. to the voice-control section 600 through a signal line 271 based on the input signal inputted from I/O Port 205 through a signal line 270.

[0070] The winning-a-prize data signal input circuit 212 outputs the winning-a-prize data signal inputted from the awarded-balls control section 700 through a signal line 272 to MCU203 for game control through a signal line 273 and I/O Port 205. The awarded-balls number signal output circuit 213 outputs an awarded-balls number signal to the awarded-balls control section 700 through a signal line 275 based on the input signal inputted from I/O Port 205 through a signal line 274. That is, an awarded-balls number signal is given to the awarded-balls control section 700 according to the winning-a-prize data signal from the awarded-balls control section 700.

[0071] Specifically, when there is an input of the winning-a-prize data signal corresponding to ON of the pattern starting mouth switch 304 specially, "5" is outputted as an awarded-balls number signal, and when there is an input of the winning-a-prize data signal corresponding to ON of the count switch 303 or the specific field switch 304, "15" is outputted as an awarded-balls number signal. And when each of these switches do not turn on and there is an input of a winning-a-prize data signal, "10" is outputted as an awarded-balls number signal.

[0072] The information output circuit 214 is based on the input signal inputted from I/O Port 205 through a signal line 276. The great success information which shows under generating of great success, the probability change information which shows that it is in probability upset condition, The special pattern decision information which shows the decision of a special pattern [in / pattern decision information and a ** view game / usually] in a normal pattern game which usually shows decision of a pattern, the effective starting sphere information which shows the number of the starting winning-a-prize sphere used for the start of a ** view game are outputted to the information output section 800 through a signal line 277.

[0073] Drawing 4 is drawing showing the sensor and switch which constitute an input switch group. The input switch group 300 usually consists of the pattern starting switch 301, the special pattern starting switch 302, a count switch 303, a specific field switch 304, a winning-a-prize sphere pilot switch 305, etc.

[0074] Usually, the pattern starting switch 301 is a Hall sensor for detecting the game sphere which usually passed through the inside of the pattern starting gate 2,

and the pattern starting switch 302 is a Hall sensor for detecting the game sphere which won a prize in the pattern starting mouth 5 specially specially similarly. Moreover, the count switch 303 is a Hall sensor for detecting the game sphere which won a prize in the large winning-a-prize mouth 7, and the specific field switch 304 is a Hall sensor for detecting the game sphere which passed through the specific field 9 in the large winning-a-prize mouth 7. Moreover, the winning-a-prize sphere pilot switch 305 is a Hall sensor for detecting the game sphere which won a prize in other winning-a-prize mouths.

[0075] Usually, a game sphere judges "passage" or "winning a prize" as follows to be "operation opportunity formation", when the pattern starting mouth switch 304, the count switch 303, and the specific field switch 304 are passed specially, the pattern starting switch 301 and.

[0076] Usually, by the pattern starting switch 301, when the game control section 200 checks the state of I/O Port 205 every 2 mses and detects ON continuously twice, it judges with "operation opportunity formation." If it is "operation opportunity formation", the random number R1 for a pattern judging is usually extracted, and it stores in the bank for a common pattern judging according to the number of operation hold spheres. Moreover, a pattern winning-a-prize storage counter is usually extracted, and it stores in the number bank of storage at the time of winning a prize corresponding to the number of operation hold spheres, and usually adds to the value of a pattern passage storage counter one time.

[0077] Specially, with the pattern starting mouth switch 304, when the game control section 200 checks the state of I/O Port 205 every 2 mses and detects ON continuously twice, it judges with "operation opportunity formation." If it is "operation opportunity formation", the random number R2 for a pattern judging and the random number radiographic for a great success pattern judging are extracted specially, and it stores in the bank for a special pattern judging and the bank for a great success pattern judging according to the number of operation hold spheres. Moreover, a pattern winning-a-prize storage counter is extracted specially, and it stores in the number bank of storage at the time of winning a prize corresponding to the number of operation hold spheres, and adds to the value of a pattern winning-a-prize storage counter one time specially.

[0078] With the count switch 303, when the game control section 200 checks the state of I/O Port 205 every 2 mses and detects ON continuously twice, it judges with "winning a prize." If it is "winning a prize", at the time under great success, it will add to the value of a large winning-a-prize mouth winning-a-prize number counter one time. Moreover, a large winning-a-prize **** winning-a-prize error and a specific field passage error are canceled out of an error flag. Similarly, with the specific field switch 304, when the game control section 200 checks the state of I/O Port 205 every 2 mses and detects ON continuously twice, it judges with "passage." It judges whether if it is "passage", it is among a specific field effective time, and if it is among an effective time, specific field passage of a game sphere will be set as a

specific field passage flag.

[0079] In the winning-a-prize sphere pilot switch 305, when the game control section 200 checks the state of I/O Port 205 every 2 mses and detects ON continuously twice, it judges with "winning a prize." If it is "winning a prize", a winning-a-prize signal will be outputted from the winning-a-prize sphere pilot switch 305 to the awarded-balls control section 700, consequently the winning-a-prize data signal input circuit 212 will be outputted from the awarded-balls control section 700.

[0080] Drawing 5 is drawing showing each solenoid which constitutes an output solenoid group. The output solenoid group 400 usually consists of a solenoid 401 for electric accessories, a solenoid A402 for large winning-a-prize mouths, and a solenoid B403 for large winning-a-prize mouths. Usually, the solenoid 401 for electric accessories is for performing switching action of the electric tulip type accessory 4, and the solenoid A402 for large winning-a-prize mouths and the solenoid B403 for large winning-a-prize mouths are for opening and closing the switching action and the specific field 9 of the large winning-a-prize mouth 7.

[0081] Drawing 6 is the block diagram showing the example of a system configuration in the display-control section. The display-control section 500 consists of various circuits prepared in the display-control substrate, and the game control section 200 performs independently the display control for the image processing in a ** view game. The display-control section 500 displays specially the picture used for a ** view game based on the indicative-data signal specially outputted through a signal line 261 from the pattern display circuit 208 on the pattern display 6. For this reason, the display-control section 500 is equipped with an oscillator circuit 501, a reset circuit 502, MCU503 for display controls, control ROM 504 and I/O Port 505, the video display controller (following, VDC:VideoDisplay Controller) 506, characters ROM507 and VRAM (VideoRAM)508, and the LCD drive circuit 509.

[0082] An oscillator circuit 501 outputs a reference clock signal to MCU503 for display controls through a signal line 551, and a reset circuit 502 outputs the reset signal for resetting MCU503 for display controls through a signal line 552. MCU301 for display controls uses 32-bit CPU521 of MC68 system (U.S. Motorola, Inc.) as a core, and MCU503 for display controls is equipped with a work RAM 522.

[0083] CPU521 will read the control data for a display control from control ROM 504 through a signal line 582, using a work RAM 522 as a working area through a signal line 581, if command data are specially inputted through a signal line 261 from the pattern display circuit 208. Moreover, CPU521 outputs a control signal to VDC506 through a signal line 554 based on the read control data.

[0084] Control ROM 504 is semiconductor memory which stores the various control programs used by MCU503 for display controls. I/O Port 505 is an interface for delivering the input signal from the game control section 200 to MCU503 for display controls. VDC506 has the CRTC (Cathode RayTube Controller) function and high-speed drawing function for performing a screen display, and operates according to

the drawing instruction from CPU521. Moreover, it has the two-dimensional address space which became independent in CPU521, and VRAM508 is mapped there.

[0085] VDC506 reads character image data from a character ROM 507 through a signal line 583 based on the inputted control signal. And display image data are generated using the read character image data, and the image data is stored in VRAM508 through a signal line 584. Finally the image data stored in VRAM508 is read by VDC506. And VDC506 outputs the image data read from VRAM508 through the signal line 584 to the LCD drive circuit 509 through a signal line 555.

[0086] A character ROM 507 is for storing beforehand the high character image data, for example, the person, the animal, the character, figure, or sign of operating frequency also in the picture specially displayed on the pattern display 6. VRAM508 is the frame buffer memory for storing the image data generated by VDC506. The LCD drive circuit 509 changes the image data inputted from VDC506 through the signal line 555 into the video signal which consists of a chrominance signal and a synchronizing signal, and outputs it to LCD which constitutes the pattern display 6 specially through a signal line 556.

[0087] Drawing 7 is the block diagram showing the example of a system configuration in the voice-control section. The voice-control section 600 consists of various circuits prepared in the electric-spectaculars control board, and mainly performs the voice control for the speech processing in a ** view game, and the display control for driving the lamp and Light Emitting Diode which were arranged by the 10th page of the game board, and the frame 30 for game machines.

[0088] The voice-control section 600 is equipped with an oscillator circuit 601, a reset circuit 602, MCU603 for voice controls, I/O Ports 604 and 605, the speech synthesis circuit 606, the voice amplifying circuit 607, and the Light Emitting Diode drive circuit 608. An oscillator circuit 601 outputs a reference clock signal to MCU603 for voice controls through a signal line 651, and a reset circuit 602 outputs the reset signal for resetting MCU603 for voice controls through a signal line 652.

[0089] MCU603 for voice controls is equipped with ROM622 and RAM623 by using CPU621 as a core. CPU621 will read data, Light Emitting Diode drive data, etc. for a voice control from ROM622 through a signal line 681, if command data are inputted through a signal line 269 from the sound output circuit 210. And the control signal corresponding to the data read from ROM622 is outputted to I/O Port 605 through a signal line 654, using RAM623 as a working area through a signal line 682.

[0090] I/O Port 604 is an interface for delivering the input signal from the game control section 200 to MCU603 for voice controls, and I/O Port 605 is an interface for delivering the output signal from MCU603 for voice controls to the speech synthesis circuit 606 or the Light Emitting Diode drive circuit 608. The speech synthesis circuit 606 is for generating BGM (BackGround Music) and the sound effect in a ** view game, and the volume amplifying circuit 607 amplifying the sound signal generated by the speech synthesis circuit 606, and outputting to the stereo loudspeakers 61L and 61R.

[0091] That is, the voice-control section 600 reproduces the voice used for a ** view game based on the voice data signal outputted through a signal line 269 from the sound output circuit 210 from the stereo loudspeakers 61L and 61R. Moreover, based on the signal outputted through a signal line 271 from the electric-spectaculars signal circuit 211, flicker control of Frame Light Emitting Diode etc. is performed.

[0092] Drawing 8 is the block diagram showing the example of a system configuration in an awarded-balls control section. The awarded-balls control section 700 consists of various circuits prepared in the awarded-balls substrate, and mainly performs expenditure control of a game sphere etc., and delivers and receives data between the prepaid card units 900. For this reason, the awarded-balls control section 700 is equipped with an oscillator circuit 701, a reset circuit 702, MCU703 for awarded-balls control, and I/O Ports 704 and 705.

[0093] An oscillator circuit 701 outputs a reference clock signal to MCU703 for awarded-balls control through a signal line 751, and a reset circuit 702 outputs the reset signal for resetting MCU703 for awarded-balls control through a signal line 752, MCU703 for ***** control uses CPU721 as a core, and it is equipped with ROM722 and RAM723. CPU721 inputs an awarded-balls number signal from the awarded-balls number signal output circuit 213 through a signal line 275 while it operates considering RAM723 as a working area based on the program in ROM722 and outputs a winning-a-prize data signal to the winning-a-prize data signal input circuit 212 through a signal line 272.

[0094] I/O Port 704 is an interface for delivering the input signal from the game control section 200 to MCU703 for awarded-balls control, and I/O Port 705 is an interface for performing data transfer with MCU703 for awarded-balls control, a sensor, a drop, etc. It connects with an error message machine, sphere piece detector, full detector, and sphere expenditure detector, an expenditure motor, the expenditure solenoid, the awarded-balls Light Emitting Diode group 37, the sphere piece Light Emitting Diode group 38, and the prepaid card unit 900 at I/O Port 705.

[0095] In addition, the touch substrate 720 which performs discharge control of a game sphere based on the input signal from the launcher handle 56 and the launcher lever 57 is connected to the awarded-balls control section 700, and the switch input from the single-engined discharge switch 722 is inputted into this touch substrate 720 as the handle touch sensor 721. The handle touch sensor 721 is a ground touch sensor formed in the launcher lever 57 of the launcher handle 56, and is turned on by grounding the launcher lever 57 by the conductor. By this, if a game person touches the launcher lever 57, the handle touch sensor 721 will be turned on and operation of the launcher lever 57 by the game person will be detected. The single-engined discharge switch 722 is a switch sensor for discharging a game sphere by the discharge intensity corresponding to the rotation position of the launcher lever 57.

[0096] Drawing 9 is the block diagram showing the example of a system

configuration in the information output section. The information output section 800 is the output terminal group prepared in the information terminal substrate, and outputs the various information outputted through a signal line 277 from the information output circuit 214 to host computers, such as a management computer of a hole. The great success information which shows under generating of great success, the probability change information which shows that it is in probability upset condition, the special pattern decision information which shows the decision of a special pattern [in / pattern decision information and a ** view game / usually] in a normal pattern game which usually shows decision of a pattern, the effective starting sphere information which show the number of the starting winning-a-prize sphere used for the start of a ** view game specifically output outside.

[0097] Next, operation (operation) of this example is explained.

[0098] First, the outline of the flow of the game in the pachinko game machine of this example is explained. By operating the launcher handle 56 prepared in the lower right position of the pachinko game machine 1, the game sphere discharged from the launcher 55 is guided at a guide rail, and is discharged all over the game field 13 in the game board 10.

[0099] In the game control section 200, the existence of inputs, such as the pattern starting switch 301, the special pattern starting switch 302, the count switch 303, and the specific field switch 304, is usually supervised. When a game sphere wins specially a prize of the pattern starting mouth 5, while winning a prize of a game sphere is specially detected in the pattern starting switch 302, removal, logic conversion, etc. of the chattering of a detecting signal are performed, and input process is performed.

[0100] Moreover, when winning a prize of a game sphere is detected, while the number of the game spheres which won specially a prize of the bank for a pattern judging is specially memorized to a part for four in the pattern starting mouth 5, the lottery value of the random number at the time of winning a prize is also kept temporarily specially on the bank for a pattern judging. And based on winning-a-prize storage of the game sphere to the pattern starting mouth 5, i.e., the data kept specially on the bank for a pattern judging, a ****** game is specially started in the pattern display 6.

[0101] In a ** view game, various processings are performed based on ** view flag information. The pattern memory (not shown) for storing the last halt pattern is prepared in the game control section 200, and this pattern memory is specially updated one by one for every reset interruption as a storage region of the indicator-chart handle corresponding to each special pattern viewing areas 6a, 6b, and 6c in the pattern display 6.

[0102] Next, the game control section 200 judges whether the idle state of a change pattern is in a great success state, it is in a reach state, or it is in a HAZURE state, and when it judges that it is in a HAZURE state at the reach pattern memory storage in RAM223 when it judges that it is in a reach state at the great success

pattern memory storage in RAM223 when it judges that it is in a great success state, it stores pattern data in the HAZURE pattern memory storage in RAM223, respectively.

[0103] On the other hand by CPU221, a great success judging, a reach judging, and a HAZURE judging is determined based on the halt pattern extracted with the lottery value of great success determination. in a great success judging A halt pattern is decided with the great success pattern stored in great success pattern memory storage. in a reach judging While deciding a halt pattern with the reach pattern stored in reach pattern memory storage, in a HAZURE judging, a halt pattern is decided with the HAZURE pattern memorized by HAZURE pattern memory storage.

[0104] The concerning pattern display 6 specially indicator-chart handle data set up in a ** view game memorize the data for a number coma including the last halt pattern in RAM223, and output this memorized indicator-chart handle data to the display-control section 500 one by one through the pattern display circuit 208 specially. In the display-control section 500, the procedure mentioned later performs the change display of each indicator-chart handle specially displayed on the pattern display 6.

[0105] Next, the content of processing in a game control section is explained in detail.

[0106] Drawing 10 is a flow chart which shows the example of processing operation in a game control section. MCU203 for game control in this example is started every about 2 mses by the fixed reset signal inputted from the fixed reset circuit 202, as mentioned above. Namely, the game control section 200 uses a reset interruption method, and performs each following processing for every reset interruption.

[0107] If the game control section 200 is started by the fixed reset signal, the game control section 200 will perform the so-called stack set processing which sets a stack-pointer specification address to a stack pointer (Step S101). Next, the game control section 200 checks the flag information for system checks. Here, when the flag information for system checks is the value from which the content of RAM223 is unfixed like [just behind an overrun or powering on of a program], and a normal operation decision value differs, system check processing which clears the working area in RAM223 is performed (Step S102).

[0108] Subsequently, the game control section 200 performs time-sharing processing with information output processing which acquires the various flag information in a normal pattern game and a ** view game etc., and sound output processing which outputs the sound effect in a normal pattern game and a ** view game, and the audible tone at the time of error generating (Step S103). next, count switch processing corresponding to the state where the state of the count switch 303 was detected and detected is performed (Step S104), then normal pattern starting-switch processing corresponding to the state where the state of the pattern starting switch 304 was usually detected and detected is performed (Step S105), and a detail is mentioned later -- pattern process processing is usually

performed (Step S106)

[0109] Similarly, specific field switch processing corresponding to the state wher the state of the specific field switch 304 was detected and detected is performed (Step S107). Next, ** view starting-switch processing corresponding to the state where the state of the pattern starting switch 303 was detected and detected specially is performed (Step S108), and special pattern process processing which mentions a detail later is performed (Step S109).

[0110] Subsequently, the random number R1 for a common pattern judging and the random number update process for updating each random number of the random number R2 for a pattern judging, the random number radiographic for a great success pattern judging, the random number RH for a reach judging, and the random number RD for a cover display judging specially which are the random number for a judgment used for a normal pattern game and a ** view game are performed (Step S110). then, it is the random number for indicator-chart handles used for a normal pattern game and a ** view game — usually — the random number RF for patterns — specially — the random number RL for pattern left — the random number RC for the inside of a pattern and the indicator-chart handle random number update process for updating each random number of the random number RR for pattern right specially are performed specially (Step S111)

[0111] And in the count switch 303, the game control section 200 performs error processing which emits an audible tone if needed at the time of error generating while it detects inaccurate existence, such as an error whose prize a game sphere did not win into the released time of the large winning-a-prize mouth 7 non-won a prize, or a sphere plugging error with which the game sphere has been got blocked into the large winning-a-prize mouth 7, and judges the existence of error generating (Step S112).

[0112] Furthermore, through the switch input circuit 206, the game control section 200 inputs the detecting signal from the input switch group 300, and performs winning-a-prize sphere processing in which the winning-a-prize existence to each winning-a-prize mouth or winning-a-prize equipment is judged (Step S113). Subsequently, the game control section 200 performs output processing for transmitting commands, such as voice data, a display-control signal, trim Light Emitting Diode, a trim lamp, an information signal, a solenoid driving signal, and an awarded-balls number signal, to each output port (Step S114).

[0113] Then, the game control section 200 repeats the remaining time processing which updates the random number for indicator-chart handle determination, and the random number for a judgment until a fixed reset signal is given from the fixed reset circuit 202 (Step S115). In addition, the random number RH for a reach judging and the random number RD for a cover display judging are added here in addition to the random number for indicator-chart handle determination, and by the time a fixed reset signal is inputted, every one of the random numbers of these will be added, respectively.

[0114] Hereafter, the random number generation in the counter of the beam riser method of this example is explained. The actual random number generation in this example is generated by the counter of the beam riser method which it counts up one [at a time] regularly whenever a fixed reset signal is outputted from the fixed reset circuit 202. That is, correctly, although the uniform random number has not become, since it is a very short period called about 2 mses corresponding to timer-interrupt processing in the time when 1 **** of the counters of a beam riser method is carried out, and there is dispersion in the timing which carries out income of the counter value and the random number generated by this example says that a round period is also short enough, it is used as a random number by this example.

[0115] the random number used by this example —— usually —— the random number R1 for a pattern judging —— specially —— the random number R2 for a pattern judging —— usually —— the random number RF for patterns, and the random number radiographic for a great success pattern judging —— specially —— the random number RL for pattern left —— specially —— the random number RC for the inside of a pattern —— it is each random number of the random number RR for pattern right, the random number RH for a reach judging, and the random number RD for a cover display judging specially The function as a lottery means in this example is realized by acquiring these random numbers according to the winning-a-prize timing of for example, a game sphere.

[0116] Usually, the random number R1 for a pattern judging is a random variable for judging whether in a normal pattern game, it considers as a small hit, the range of it is "3"-" 13", and it is added to every reset interruption (2 mses) every [1], and has composition which returns to the degree of "13" "3." The random number R1 for a pattern judging is usually extracted at the time of passage of the pattern starting switch 301, and is usually stored in the bank for a common pattern judging corresponding to a pattern passage storage counter. the time of the stored value usually judging a pattern —— reading —— the judgment of a small hit —— using it . At the time of low probability, if it is "3"-" 5", it will judge with a small hit, and when a value is "6"-" 13", it considers as HAZURE. Moreover, at the time of high probability, if it is "3"-" 12", it will judge with a small hit, and when a value is "13", it considers as HAZURE.

[0117] Similarly, specially, the random number R2 for a pattern judging is a random variable for judging whether in a ** view game, it considers as great success, the range of it is "0"-" 630", and it is added to every reset interruption (2 mses) every [1], and has composition which returns to the degree of "630" "0." The random number R2 for a pattern judging is specially extracted at the time of passage of the pattern starting switch 302, and is specially stored in the bank for a special pattern judging corresponding to a pattern winning-a-prize storage counter. In case the stored value performs a great success judging, it is read, and at the time of "7", "373", and high probability, if it is "7", "29", "127", "233", "311", "373", "433", "557", "607", and "619", it will judge with great success at the time of low

probability, and, in the case of other values, be made into HAZURE at it.

[0118] The random number radiographic for a great success pattern judging is a random variable for judging the indicator-chart handle at the time of great success, the range of it is "0"-" 11", and it is added to every reset interruption (2 mses) every [1], and has composition which returns to the degree of "11" "0." The random number radiographic for a great success pattern judging is specially extracted at the time of passage of the pattern starting switch 302, and is specially stored in the bank for a great success pattern judging corresponding to a pattern winning-a-prize storage counter. In case the stored value performs pattern halt processing specially, it is read, and when considering as great success, it is specially used for selection of the halt pattern of a pattern.

[0119] Usually, the random number RF for patterns is a random variable for judging the halt pattern in a normal pattern game, the range of it is "0"-" 5", and it is added to every reset interruption (2 mses) every [1], and has composition which returns to the degree of "5" "0." The random number RF for patterns is usually extracted at the time of passage of the pattern starting switch 301, and is usually stored in the bank for a common pattern judging corresponding to a pattern winning-a-prize storage counter. In case the stored value usually performs pattern halt processing, it is read, and it is usually used for selection of the halt pattern of a pattern.

[0120] It is a random variable for judging the random number RL for pattern left, and the temporary halt pattern at the time of performing a re-change display, when the random number RR for pattern right serves as HAZURE in a ** view game specially, the random number RC for the inside of a pattern, and specially. It has specially the random number RL for pattern left, the random number RC for the inside of a special pattern, and composition that the range of both the random numbers RR for pattern right is "0"-" 11", adds one at a time, and returns to the degree of "11" specially "0." The random number RL for pattern left is specially added every [1] during every reset interruption (2 mses) and the remaining time processing shown in Step S115 of drawing 10 . specially however, the random number RC for the inside of a pattern Whenever the random number RL for pattern left carries out a beam riser to "0" from "11" specially, and whenever the random number RC for the inside of a pattern carries out the beam riser of the random number RR for pattern right to "0" from "11" specially, it adds one at a time.

[0121] The random number RH for a reach judging is a random variable for judging the production pattern when changing into a reach state, the range of it is "0"-" 99", and it is added every [1] during every reset interruption (2 mses) and the remaining time processing shown in Step S115 of drawing 10 , and has composition which returns to the degree of "99" "0." In case the random number RH for a reach judging performs setting processing of a reach flag, it is extracted, and it is used in order to choose a reach pattern from reach distribution table data as shown in [Table 1].

[0122]

[Table 1]
(リーチ振り分けテーブルデータ)

リーチ種別	高確率時当たり	低確率時当たり	ハズレ
'パターンA'	—	"0" 〜 "9"	"0" 〜 "39"
'パターンB'	"0" 〜 "9"	"10" 〜 "19"	"40" 〜 "79"
'パターンC'	"10" 〜 "19"	"20" 〜 "49"	"80" 〜 "99"
'パターンD'	"20" 〜 "59"	"50" 〜 "69"	--
'パターンE'	"60" 〜 "99"	"70" 〜 "99"	—

That is, the random number R2 for a pattern judging hits specially, and when it is a value, the reach pattern to 'Pattern E' is chosen from 'Pattern B' by the value of the random number RH for a reach judging at the time of high probability. Similarly, all the reach patterns to 'Pattern E' are chosen from 'Pattern A' by the value of the random number RH for a reach judging at the time of low probability. On the other hand, when the random number R2 for a pattern judging is HAZURE specially, the reach pattern with which even 'Pattern C' was restricted from 'Pattern A' is chosen by the value of the random number RH for a reach judging.

[0123] The random number RD for a cover display judging is a random variable for judging whether a partial-occlusion display is performed to the important section (this example face picture) of "the pattern in a special pattern" which is the last halt pattern, when it changes into a reach state. In "0"-" 62", it adds every [1] during every reset interruption (2 mses) and the remaining time processing shown in Step S115 of drawing 10 , and has composition which returns to the degree of "62" "0." In case the random number RD for a cover display judging performs judgment processing of a partial-occlusion display, it is extracted, and it is used in order to choose the existence of a partial-occlusion display from cover display distribution table data as shown in [Table 2].
[0124]
[Table 2]

（遮蔽表示振り分けテーブルデータ）

部分遮蔽表示の有無	当たり	ハズレ
部分遮蔽表示あり・	"0" 〜 "41"	"62"
部分遮蔽表示なし	"42" 〜 "62"	"0" 〜 "61"

That is, the random number R2 for a pattern judging hits specially, when it is a value, it is got blocked 42/63, and it judges with what performs a partial-occlusion display by the probability of 2/3, and on the other hand, when the random number R2 for a pattern judging is a HAZURE value specially, a partial-occlusion display is performed by the probability of 1/63. Since great success probability is 2/631, the pachinko game machine 1 of this example the probability of performing a partial-occlusion display At the time of low probability, 713 (=(2/631) x(2/3) +(629/631) x (1/63))/39753, It has dropped to 1041 (=(10/631) x(2/3) +(621/631) x (1/63))/39753 at the time of high probability, and average probability drops to about 1/45.328.

[0125] Thus, the probability of performing a partial-occlusion display at the time of low probability is 713/39753, and the degree of great success expectation at this time has become about 11.2% (84/713). On the other hand, the probability of performing a partial-occlusion display at the time of high probability is 1041/39753, and the degree of great success expectation at this time has become about 40.3% (420/1041).

[0126] Drawing 11 is a flow chart which shows the example [in / pattern process processing / usually] of processing of drawing 10 . By pattern process processing, corresponding processing is usually specially performed alternatively like pattern process processing according to the normal pattern flag information for controlling the pachinko game machine 1 in predetermined sequence according to a game state. And the value of normal pattern flag information is updated during each processing according to a game state. By pattern process processing, each processing shown below corresponding to normal pattern flag information is usually performed.

[0127] When the value of normal pattern flag information is "0", it performs "it being usually waiting processing for pattern change" (Step S201). [which performs initialization processing before a change display in a normal pattern game] When the value of normal pattern flag information is "1", it performs "it being usually pattern judging processing" (Step S202). [which judges whether the pattern usually serves as a small hit] When the value of normal pattern flag information is "2", it performs "it being usually pattern change processing" (Step S203). [which usually performs change processing in a normal pattern game in the pattern display 3]

[0128] When the value of normal pattern flag information is "3", it performs "it being usually pattern halt processing" (Step S204). [which usually performs halt processing of a pattern] When the value of normal pattern flag information is "4", it performs "it being usually electric accessory opening processing" (Step S205). [which performs open control of the electric tulip type accessory 4 which is usually an electric accessory]

[0129] In a normal pattern game, when a game sphere usually passes through the pattern starting gate 2, a small hit of a pattern and HAZURE are usually judged with the value of the random number R1 for a pattern judging. When it becomes a small hit as a result of a judgment, "7" used as a small hit is usually displayed on the pattern display 3. On the other hand, when it becomes HAZURE, the common pattern corresponding to the value of the random number RF for patterns is usually displayed.

[0130] Drawing 12 is usually drawing corresponding to the value of the random number for patterns usually showing a pattern. When the value of the random number RF for patterns is usually "0", it is set [at the time of "0" and "1"] to "9" at the time of "7" and "5" at the time of "5" and "4" at the time of "3" and "3" at the time of "1" and "2." in addition -- usually -- the judgment result of the random number R1 for a pattern judging -- HAZURE -- it is also -- when it does not buy but the value of the random number RF for patterns is usually set to "4", "9" is usually compulsorily displayed as a pattern

[0131] Drawing 13 is a timing chart for [in a normal pattern game] usually explaining the definite procedure of a pattern. There are two kinds of the times of low probability and high probability of change time of a pattern, and it usually decides on change time as it according to the state at the time of the change start of a pattern. Usually, a pattern will serve as "operation opportunity formation", if ON is continuously detected twice at intervals of 2 mses as shown in drawing 13 (a), in case a game sphere usually passes the pattern starting switch 301. When it comes to "operation opportunity formation", as shown in drawing 13 (b), the change display of a pattern is usually started after 2 mses from "operation opportunity formation", and it stops after 5.100 seconds after 29.200 seconds at the time of high probability at the time of low probability.

[0132] In addition, if a halt pattern is set to "7" (refer to drawing 12) and serves as a small hit, the solenoid 401 for electric accessories will usually be excited after 2 mses from the time of a pattern halt, and open operation of the electric tulip type accessory 4 will be performed. At this time, as shown in drawing 13 (c) at the time of low probability, open operation for 0.5 seconds is performed once, as shown in drawing 13 (d) at the time of high probability, it is closed down after open operation for 2.2 seconds, and open operation for 2.2 seconds is again performed after 3 seconds. The probability which displays the pattern from which a pattern usually serves as a small hit has dropped to 10 (about 1/1.1)/11 at the time of 3 (about 1/3.667)/11 and high probability at the time of low probability, and average

probability drops to about 1/2.38.

[0133] Drawing 14 is a flow chart which shows the example [in / pattern process processing / specially] of processing of drawing 10 . By pattern process processing, corresponding processing is specially performed alternatively according to the ✳✳ view flag information for controlling the pachinko game machine 1 in predetermined sequence according to a game state. And the value of ✳✳ view flag information is updated during each processing according to a game state. By pattern process processing, each processing shown below corresponding to ✳✳ view flag information is performed specially.

[0134] When the values of ✳✳ view flag information are "0" and "1", it judges whether the random number value which cast lots in the ✳✳ view game is in agreement with a great success value, or "special pattern usual processing" in the usual game states, such as processing specially reported outside by lighting of the ✳✳ view hold storage displays 5a-5d corresponding to a pattern winning-a-prize storage counter, is performed (Steps S301 and S302). When the value of ✳✳ view flag information is "2", "special pattern change start processing" which starts the change display in a ✳✳ view game in the pattern display 6 specially is performed (Step S303). When the value of ✳✳ view flag information is "3", "special pattern change processing" which performs change processing in a ✳✳ view game in the pattern display 6 specially is performed (Step S304).

[0135] When the value of ✳✳ view flag information is "4", "special pattern left slowdown processing" which performs slowdown halt processing of the special pattern left figure handle which is the 1st halt pattern at the time of non-probability change is performed (Step S305). When the value of ✳✳ view flag information is "5", "special pattern right slowdown processing" which performs slowdown halt processing of the special pattern right figure handle which is the 2nd halt pattern at the time of non-probability change is performed (Step S306). When the value of ✳✳ view flag information is "6", "slowdown-among special pattern processing" which performs slowdown halt processing of the pattern in a special pattern which is the last halt pattern at the time of non-probability change is performed (Step S307).

[0136] the time of the value of ✳✳ view flag information being "7" -- the [the 1st halt pattern and] -- 2 halt patterns, i.e., "special pattern reach processing" which performs the production display of a pattern left figure handle and a reach state when a pattern right figure handle is in agreement specially specially, are performed (Step S308) When the value of ✳✳ view flag information is "8", while judging whether a partial-occlusion display is performed, "special pattern cover display processing" which performs a partial-occlusion display based on the random number RD for a cover display judging is performed (Step S309). When the value of ✳✳ view flag information is "9", "special pattern halt processing" which performs halt processing of the special pattern at the time of probability change is performed (Step S310).

[0137] When the value of ✳✳ view flag information is "10", "large winning-a-prize mouth opening pretreatment" which performs initialization processing for great

success operation is performed (Step S311). When the value of ** view flag information is "11", it performs "processing during large winning-a-prize mouth opening" (Step S312). [which checks the released time of various processings about great success operation, and the large winning-a-prize mouth 7 per time] When the value of ** view flag information is "12", various processings during an interval period and "large winning-a-prize mouth opening after treatment" which reconfigures the various flags set at the time of great success at the time of a processing end are performed (Step S313).

[0138] And after performing each processing by the value of ****** view flag information, display-control processing is performed (Step S314). In addition, as each processing specially performed in pattern process processing, it does not restrict only to the processing mentioned above, and it may replace by other processings or processing of further others may be added. Moreover, when the content of processing of each processing which branches with the value of ** view flag information can be complicated and processing cannot be made to complete within reset interruption time, you may make it add two or more same processings like this example.

[0139] In a ** view game, when a game sphere passes the pattern starting mouth 5 specially, great success of a pattern and HAZURE are specially judged with the value of the random number R2 for a pattern judging. When it is becoming it a great success as a result of a judgment, the combination of the special pattern corresponding to the value of the random number radiographic for a great success pattern judging is specially displayed on the pattern display 6 at the pattern display 6. On the other hand, when it becomes HAZURE, the random number RL for pattern left, the random number RC for the inside of a special pattern, and the special pattern corresponding to the value of the random number RR for pattern right are displayed specially.

[0140] Drawing 15 is drawing showing the special pattern corresponding to the value of the random number for patterns specially. Specifically, the character picture which assigned four kinds of face pictures from which a hairstyle differs to this arm picture using the random number RL for pattern left and the arm picture which has arranged the fist of both arms before a breast specially when each value of the random number RR for pattern right is "0"-" 3" specially, the random number RC for the inside of a pattern and, respectively is specially used as a pattern. Similarly, the character picture which assigned four kinds of face pictures from which a hairstyle differs to this arm picture using the arm picture in the random number RL for pattern left and the state where their arms were specially folded when each value of the random number RR for pattern right was "4"-" 7" specially, the random number RC for the inside of a pattern and, respectively is specially used as a pattern.

[0141] The character picture which assigned four kinds of face pictures from which a hairstyle differs to this arm picture, respectively using the random number RL for

pattern left and the arm picture of the so-called dismay state which opened both hands specially when each value of the random number RR for pattern right was "8"-"11" specially, the random number RC for the inside of a pattern and, and has been arranged right and left is specially used as a pattern. Moreover, in this example, the arm picture is used as a common element and a mask picture is used for the portion as a wrap cover object to the arbitrary portions, i.e., the face picture, other than a common element.

[0142] Drawing 16 is drawing showing the special pattern which added the cover object. In this example, the mask picture is used as a cover object, and as shown in this drawing (a) – (c), three kinds of special patterns which combined three kinds of arm pictures mentioned above to this mask picture are prepared. In addition, it does not restrict to what displays the picture which shows the state where arm picture portions other than the face picture of a pattern were beforehand covered specially like this example by the mask picture which is a cover object on the gestalt of the special pattern which added the cover object. For example, it is possible to display a wrap cover object for a face picture, and to arrange and display a cover object on the front face of a face picture.

[0143] Moreover, the judgment result of the random number R2 for a pattern judging is HAZURE specially, and each value of the random number RR for pattern right is the same, specially, the random number RL for pattern left, and when it becomes the combination of the random number RC for the inside of a pattern, and the pattern which is becoming it a great success, it subtracts from the value of the random number RC for the inside of a pattern one time specially, and the pattern used as HAZURE is displayed. That is, in great success, in the random number radiographic for a great success pattern judging, and HAZURE, the random number RL for pattern left, the random number RC for the inside of a special pattern, and the special pattern corresponding to each value of the random number RR for pattern right are specially displayed with the value of the random number R2 for a pattern judging.

[0144] Drawing 17 and drawing 18 are drawings for explaining the definite procedure of the special pattern in a ** view game, drawing 17 shows the definite procedure of the special pattern which comes out reach operation nothing, and drawing 18 shows the definite procedure of the special pattern in those with reach operation.

[0145] Specially, a pattern will serve as "operation opportunity formation", if ON is continuously detected twice at intervals of 2 mses as shown in drawing 17 (a), in case a game sphere passes the pattern starting switch 302 specially. when it comes to "operation opportunity formation", it is shown in drawing 17 (b) – (d) –– as –– after [from "operation opportunity formation"] 2 mses –– specially –– a pattern left figure handle –– specially –– the pattern in a pattern –– specially –– the change display of a pattern right figure handle –– starting –– specially –– a pattern left figure handle –– specially –– a pattern right figure handle –– slowdown processing is specially performed in ord r of the pattern in a pattern, and it stops

[0146] Three kinds of slowdown processing patterns of the high-speed slowdown

processing which performs a scrolling slowdown over 0.3 seconds per indicator–chart handle 1 coma, medium–speed slowdown processing in which a scrolling slowdown is performed over 0.5 seconds per indicator–chart handle 1 coma, and low–speed slowdown processing in which a scrolling slowdown is performed over 0.7 seconds per indicator–chart handle 1 coma are prepared for slowdown processing [in / a pattern game / specially] of this example.

[0147] Here, the value of the random number R2 for a pattern judging is HAZURE specially, with the reach distribution table data shown in [Table 1], as a pattern left figure handle is specially shown in drawing 17 (b) in the case of the normal operation the value of the random number RH for a reach judging indicates 'Pattern A' (with no reach operation) to be, after accelerating for 4.6 seconds from a change start, a uniform change display is performed, and it stops by high–speed slowdown processing in 1.2 seconds after that. Similarly, specially, as shown in drawing 17 (c), after accelerating for 5.7 seconds from a change start, a pattern right figure handle performs a uniform change display, and suspends it by high–speed slowdown processing in 1.2 seconds after that. Moreover, specially, as shown in drawing 17 (d), after accelerating for 6.8 seconds from a change start, the pattern in a pattern performs a uniform change display, and suspends it by high–speed slowdown processing in 1.2 seconds after that.

[0148] And as a pattern left figure handle is specially shown in drawing 18 (a) in reach operation whose value of the random number RH for a reach judging shows 'the pattern B' – 'pattern E' (those with reach operation), after accelerating for 4.6 seconds from a change start, the value of the random number R2 for a pattern judging is HAZURE specially, and a uniform change display is performed, and after that, in 1.2 seconds, high–speed slowdown processing is performed and it stops. Similarly, specially, as shown in drawing 18 (b), after accelerating for 5.7 seconds from a change start, a pattern right figure handle performs a uniform change display, and suspends it by high–speed slowdown processing in 1.2 seconds after that.

[0149] Then, specially, as shown in drawing 18 (c), after accelerating for 6.8 seconds from a change start corresponding to the pattern in the case of 'Pattern B', the pattern in a pattern performs a uniform change display, and suspends it by high–speed slowdown processing in 1.8 – 6.3 seconds after that. As shown in drawing 18 (d), after in the case of 'Pattern C' accelerating for 6.8 seconds from a change start and performing a uniform change display, a high–speed slowdown is performed in 6.3 seconds, and it stops by medium–speed slowdown processing in 0.5 – 8.0 seconds after that.

[0150] As shown in drawing 18 (e), after in the case of 'Pattern D' accelerating for 6.8 seconds from a change start and performing a uniform change display, high–speed slowdown processing is performed in 6.3 seconds, medium–speed slowdown processing is performed in 8.0 seconds after that, and it stops by low–speed slowdown processing in 0.7 – 11.2 seconds further. as shown in drawing 18 (f), after in the case of 'Pattern E' accelerating for 6.8 seconds from a change start and

performing a uniform change display — specially — a pattern left figure handle — specially — a pattern right figure handle — each special pattern of the pattern in a pattern is united in the same pattern specially, and it stops by low-speed slowdown processing in 6.3 – 11.2 seconds

[0151] Moreover, with the cover display distribution table data shown in [Table 2], when the value of the random number R2 for a pattern judging is HAZURE specially and the value of the random number RD for a cover display judging is "62", or when the value of the random number R2 for a pattern judging is a hit specially and the value of the random number RD for a cover display judging is "0"–" 41", partial cover display processing which mentions a detail later is performed. In addition, in this example, when performing partial cover display processing, a pattern right figure handle is specially made into the same pattern as a pattern left figure handle, and it changes into a reach state compulsorily. Thus, based on the cover display distribution table data specially shown in the value and [Table 2] of the random number R2 for a pattern judging, the function in this example which carries out a partial cover display means is realized.

[0152] And if a halt pattern serves as 3 sets and is becoming it a great success in the same pattern, it will be in a specific game state, the solenoid A402 for large winning-a-prize mouths will be excited after 2 mses from the time of a pattern halt, and open operation of the large winning-a-prize mouth 7 will be performed. At this time, it is wide opened for about 29.5 seconds, and large winning-a-prize **** 8 continues this open operation a maximum of 15 times, when a game sphere passes through the specific field 9 during open operation. The probability which displays the pattern to which a pattern is becoming it a great success specially has dropped to 1/63.1 at the time of 1/315.5 and high probability at the time of low probability, and average probability drops to about 1/105.17.

[0153] Drawing 19 and drawing 20 are drawings showing the example of a display in pattern display specially when the partial-occlusion display in the 1st example is performed. In the pachinko game machine 1 of this example, since the reach state and the bird clapper are required as conditions for performing a partial-occlusion display, in performing partial-occlusion display processing, it makes a reach state compulsorily. For this reason, in the case of a partial-occlusion display, it considers as the same value by copying specially the random number value of the random number RL for pattern left by the random numbers RR for pattern right as it is so that a pattern right figure handle may turn into a pattern left figure handle and the same pattern specially.

[0154] Hereafter, partial-occlusion display processing in this example is explained. Specially, into the viewing area of the pattern display 6, in order to display a pattern specially, the pattern viewing areas 6a, 6b, and 6c are formed specially, and each display image as shown in drawing 15 is displayed on these special pattern viewing areas 6a, 6b, and 6c. As for the initial pattern of the special pattern in th pachinko game machine 1 of this example, the random number RL for pattern left, the random

number RC for the inside of a special pattern, and the display image corresponding to "2", "4", and "6" in the value of the random number RR for pattern right are used specially, respectively (refer to drawing 19 (a)).

[0155] If a game sphere passes the pattern starting mouth 5 specially, while the value of the random number R2 for a pattern judging and the random number RD for a cover display judging will be extracted specially, in the special pattern process processing mentioned above, the change display of a pattern is performed specially. Specifically, as shown in drawing 19 (b), an indicator-chart handle starts change. When the value of the random number R2 for a pattern judging is HAZURE specially and the value of the random number RD for a cover display judging is "62" here, the value of the random number R2 for a pattern judging specially by hit And when the value of the random number RD for a cover display judging is "0"-" 41", a pattern right figure handle is specially made into the same pattern as a pattern left figure handle, and as shown in drawing 19 (c), it changes into a reach state compulsorily.

[0156] Here, the mask picture from which a pattern left figure handle and the indicator-chart handle which has stopped as pattern right figure handles specially, and an arm picture portion serve as a common element specially and which is shown in drawing 16 (a) is used for the last halt pattern and the becoming pattern in a special pattern. And the mask picture concerned is stopped as a last halt pattern, as shown in drawing 19 (d). That is, although a game person's last halt pattern does not correspond with the indicator-chart handle located in right and left completely, he recognizes that a common element is contained in a part of last halt pattern. By this, it can have a hope for great success and can advance to the production display of the following stage.

[0157] As shown in drawing 19 (d), when the last halt pattern is the same arm picture as other indicator-chart handles in a reach state, the character picture located in right and left of the last halt pattern is changed, and operation at which turns to both the directions of a center used as the last halt pattern, and he grins is displayed. At this time, the character picture located in the center is also changed simultaneously, and displays operation which looks around right and left with surprise (refer to drawing 19 (e)).

[0158] Then, both the characters (henceforth, right-and-left character) located in right and left lengthen an arm, and display operation which applies a hand to the mask of a character (henceforth, central character) located in the center (refer to drawing 19 (f)). Then, a right-and-left character tends to strip off the mask which the central character is wearing (refer to drawing 20 (a)). Here, when the value of the random number R2 for a pattern judging is a hit specially, the same character as a right-and-left character is displayed as a central character after being able to strip off a mask (refer to drawing 20 (b)).

[0159] If a halt pattern serves as 3 sets in the same pattern, the plate with which the character of this ["size", / "this"], and "**" was written from the lower part of a character picture, respectively will appear gradually (refer to drawing 20 (c)), will

report that it was becoming it a great success to a game person by being arranged in the front face of a character picture (refer to drawing 20 (d)), and will shift to the specific game state accompanying great success.

[0160] On the other hand, when the value of the random number R2 for a pattern judging is HAZURE specially, the character of a different face from a right-and-left character is displayed as a central character after being able to strip off a mask (refer to drawing 20 (e)). And a right-and-left character looks at a central character, while displaying operation which is surprised to jump out of an eye, a central character applies both hands to a cheek, and operation which is surprised to vacate a mouth is displayed (refer to drawing 20 (f)). It is made to recognize that the ** view game became HAZURE to the game person by this.

[0161] Thus, in this example, when it has the same arm pattern from which the last halt pattern serves as a common element, by displaying gradually the face picture portion in which it was indicated by cover by the mask picture, the degree of similar of each indicator-chart handle increases gradually, and a coincidence state also becomes high. This can raise the degree of expectation to great success gradually to a game person.

[0162] (The 1st modification of the 1st example) Although the 1st above-mentioned example took and explained the case where used the pattern as the indicator-chart handle which consists of a face pattern and an arm pattern specially, and an arm pattern was used as a common element to the example, in this modification, the character itself is used as a common element and the case where the kind of swimming suit which the character and the character have on becomes 3 sets is considered as great success. Hereafter, although partial-occlusion display processing in this modification is explained, the same sign is attached and explained about the same element portion as the 1st example mentioned above.

[0163] Drawing 21 is drawing showing the example of a display in pattern display specially when the partial-occlusion display in the 1st modification is performed. If a game sphere passes the pattern starting mouth 5 specially, while the value of the random number R2 for a pattern judging and the random number RD for a cover display judging will be extracted specially, in the special pattern process processing mentioned above, the change display of a pattern is performed specially. When the value of the random number R2 for a pattern judging is HAZURE specially and the value of the random number RD for a cover display judging is "62" here, the value of the random number R2 for a pattern judging specially by hit And when the value of the random number RD for a cover display judging is "0"-" 41", a pattern right figure handle is specially made into the same pattern as a pattern left figure handle, and as shown in drawing 21 (a), it changes into a reach state compulsorily.

[0164] And the same character as a pattern left figure handle and the indicator-chart handle which has stopped as pattern right figure handles specially uses specially the picture which hid the swimming suit portion with the bath towel for the last halt pattern and the becoming pattern in a special pattern. And the character

picture concerned is stopped as a last halt pattern, as shown in drawing 21 (a). That is, although the swimming suit portion of the character used as the last halt pattern is making the game person hide with a bath towel, he recognizes that the character is in agreement. By this, it can have a hope for great success and can advance to the production display of the following stage.

[0165] As shown in drawing 21 (a), when the last halt pattern is the same character picture as other indicator-chart handles in a reach state, the character picture located in right and left of the last halt pattern changes, both the characters (a henceforth, right-and-left character) located in right and left lengthen an arm, and operation which applies a hand to the bath towel of the character (henceforth, central character) located in the center displays (refer to drawing 21 (b)). Then, a right-and-left character tends to lower gradually the bath towel which the central character has covered (refer to drawing 21 (c)).

[0166] Here, when the value of the random number R2 for a pattern judging is a hit specially, the character which had on the same swimming suit (this example bikini) as a right-and-left character as a central character after being able to lower a bath towel is displayed (refer to drawing 21 (d)), and it is becoming it a great success. And it shifts to the specific game state accompanying great success.

[0167] On the other hand, when the value of the random number R2 for a pattern judging is HAZURE specially, the character which had on a different swimming suit (this example dress) from a right-and-left character is displayed as a central character after being able to lower a bath towel (refer to drawing 21 (e)). And while displaying operation which a right-and-left character looks at a central character, extends both hands horizontally, and is carrying out the amazed look, a central character displays operation which is bowing and apologizing for the head (refer to drawing 21 (f)). It is made to recognize that the ** view game became HAZURE to the game person by this.

[0168] Thus, in this modification, when the last halt pattern displays gradually the swimming suit portion hidden with the bath towel, the degree of similar of each indicator-chart handle increases gradually, and a coincidence state also becomes high. This can raise the degree of expectation to great success gradually to a game person like the 1st example mentioned above.

[0169] (The 2nd modification of the 1st example) Although the 1st above-mentioned example and the 1st modification took and explained the case where a pattern was specially regarded as one character picture to the example, in this modification, two or more parts pictures shall constitute a pattern specially, and let at least one parts picture in it be a common element. Hereafter, although partial-occlusion display processing in this modification is explained, the same sign is attached and explained about the same element portion as the 1st example mentioned above.

[0170] Drawing 22 - drawing 24 are drawings showing the example of a parts picture specially used for a pattern. In the example shown in drawing 22 , the face portion of a character is used as a common element, and the cover display of a hairstyle is

performed by using a hat as a cover object. Moreover, in the example shown in drawing 23 , the mustached portion of a character is used as a common element, and the cover display of an eye is performed by using sunglasses as a cover object. In the example shown in drawing 24 , the eye portion of a character is used as a common element, and the cover display of a mouth is performed by using a mask as a cover object.

[0171] Drawing 25 is drawing showing the example of a display in pattern display specially when the partial-occlusion display in the 2nd modification is performed. As a parts picture in this modification specially used for a pattern, three parts pictures constitute a person's face like a composite picture. And either hair, an eye, a nose a mouth (or mustache), etc. are used as a common element, and a hair portion is set to viewing-area 6A, a part for viewing-area 6B, a nose, and the regio oralis is set for an eye portion to viewing-area 6C, and it indicates by change (refer to drawing 25 (a)).

[0172] The face picture of the person of search by whom the pattern game was beforehand set up when the ** view game was started by the thing in this modification for which a game sphere passes the pattern starting mouth 5 specially first is specially displayed on 6d of viewing areas. And in order of viewing-area 6A, viewing-area 6C, and viewing-area 6B, a cartridge hits, it leaves 6f of bullet marks, and an indicator-chart handle stops because sheriff character 6e discharges a cartridge from a handgun (refer to drawing 25 (b) – (d)).

[0173] The value of the random number R2 for a special pattern judging extracted when a game sphere passes the pattern starting mouth 5 specially by HAZURE When the value of the random number RD for a cover display judging is "62", the value of the random number R2 for a pattern judging specially and by hit and when the value of the random number RD for a cover display judging is "0"–" 41" It is made for the indicator-chart handle which stops change in viewing-area 6A and viewing-area 6C to become the same parts picture of a hair portion as the person of the search displayed on 6d of viewing areas, and a nose and the parts picture for the regio oralis, and it is compulsorily changed into a reach state (refer to drawing 25 (b) and (c)).

[0174] And the last halt pattern stopped to viewing-area 6B is made to stop the character picture concerned as a last halt pattern, as the portion of an eye is shown in drawing 25 (e) using the picture hidden with sunglasses. That is, although the portion of the eye used as the last halt pattern is making the game person hide with sunglasses, he recognizes that hair, the nose, and the mouth are in agreement. By this, it can have a hope for great success and can advance to the production display of the following stage.

[0175] Then, when the value of the random number R2 for a pattern judging is a hit specially, sheriff character 6e discharges a cartridge from a handgun again, performs the re-change display of the last halt pattern stopped to viewing-area 6B, displays the parts picture of the same eye portion as the person of the search displayed on

6d of viewing areas, and is taken as great success. On the other hand, when the value of the random number R2 for a pattern judging is HAZURE specially, although sheriff character 6e performs the re-change display of the last halt pattern which discharges a cartridge from a handgun again similarly and is stopped to viewing-area 6B, as shown in drawing 25 (e), it displays a different parts picture from the eye portion of the person of the search displayed on 6d of viewing areas, and is taken as HAZURE.

[0176] (The 2nd example) Although the 1st above-mentioned example took and explained the case where a common element was specially given to a pattern to the example, by this example, a pattern is specially classified into the group of a predetermined number beforehand, and when the last halt pattern is the same group as the halt pattern before it, it is made to perform a re-change display. Hereafter, although partial-occlusion display processing in this modification is explained, the same sign is attached and explained about the same element portion as the 1st example mentioned above.

[0177] Drawing 26 is drawing showing the special pattern corresponding to the value of the random number for special patterns in this example. Specifically, the character picture which assigned four kinds of face pictures which are different to this dumpling picture using the random number radiographic for pattern tops and a dumpling picture extraordinarily white the random number RM for the inside of a pattern and when each value of the random number RB for the bottoms of a pattern is "0"-" 3" specially, respectively is specially used as a pattern. Similarly, the character picture which assigned the random number radiographic for pattern tops and four kinds of face pictures it is different [pictures] to this dumpling picture using a pink dumpling picture, respectively specially when each value of the random number RB for the bottoms of a pattern is "4"-" 7" specially, the random number RM for the inside of a pattern and is specially used as a pattern.

[0178] Furthermore, the character picture which assigned four kinds of face pictures which are different to this dumpling picture using the random number radiographic for pattern tops and a dumpling picture extraordinarily green the random number RM for the inside of a pattern and when each value of the random number RB for the bottoms of a pattern is "8"-" 11" specially, respectively is specially used as a pattern. That is, at this example, the pattern is specially classified into four groups according to four kinds of face pictures assigned for every color of a dumpling picture.

[0179] Drawing 27 is drawing showing the example of a display in the special pattern display in the 2nd example. Specially, into the viewing area of the pattern display 6, in order to display a pattern specially, the pattern viewing areas 6alpha, 6beta, and 6gamma are formed specially, and each display image as shown in drawing 26 is displayed on these special pattern viewing areas 6alpha, 6beta, and 6gamma.

[0180] If a game sphere passes the pattern starting mouth 5 specially, while the value of the random number R2 for a pattern judging and the random number RD for

a cover display judging will be extracted specially, in the special pattern process processing mentioned above, the change display of a pattern is performed specially. Specifically, as shown in drawing 27 (a), an indicator-chart handle starts change. When the value of the random number R2 for a pattern judging is HAZURE specially and the value of the random number RD for a cover display judging is "62" here, the value of the random number R2 for a pattern judging specially by hit And when the value of the random number RD for a cover display judging is "0"-" 41", the pattern in a pattern is specially made into the same pattern as the pattern following figure handle, and as shown in drawing 27 (b), it changes into a reach state compulsorily.

[0181] The last halt pattern and the becoming special pattern above figure handle are made to stop specially, the pattern following figure handle and the same group specially stopped as a pattern in a pattern, i.e., the same dumpling picture of a face, as a last halt pattern here, as shown in drawing 27 (b). That is, a game person recognizes that it is the same face as the last halt pattern, although the indicator-chart design and color to which the last halt pattern is located downward differ from each other. By this, it can have a hope for great success and can advance to the production display of the following stage.

[0182] As shown in drawing 27 (b), when the last halt pattern is the same face picture as other indicator-chart designs in a reach state, as the last halt pattern is shown in this drawing (c) - (e), it is the same face picture, and is only between the dumpling pictures from which a color differs, and a re-change display is performed. Here, when the value of the random number R2 for a pattern judging is a hit specially, the last halt pattern stops by the dumpling picture of the same color, and 6g of pictures of a hand with the skewer is displayed (refer to drawing 27 (f)).

[0183] And it reports that the picture in the state where the dumpling was made into food on a skewer was displayed, and the pattern was decided to the game person on the skewer (refer to drawing 27 (g)). If a halt pattern is made into food on a skewer in the same pattern, where three dumpling pictures are able to be stuck in a skewer, it will rotate (refer to drawing 27 (h)), and the character of this ["size", / "this"], and "**" written to the background of a dumpling picture will appear (refer to drawing 27 (i)). This reports that it was becoming it a great success to a game person, and it shifts to the specific game state accompanying great success.

[0184] On the other hand, when the value of the random number R2 for a pattern judging is HAZURE specially, the last halt pattern stops by the dumpling picture of the same color or a different color, and 6g of pictures of a hand with the skewer is displayed. And it reports that the picture in the state where the dumpling was made into food on a skewer was displayed, and the pattern was decided to the game person on the skewer. when the dumpling picture of the same color has stopped at this time, it substitutes for the dumpling picture of a different color at the moment of the ability of a skewer to be stuck fraudulently -- things -- ** It is made to recognize that the ** view game became HAZURE to the game person by this.

[0185] Thus, in this example, since the degree of community of similar by group

conditions, i.e., the degree, is high between each indicator-chart handle when the last halt ****** is the same group as other halt patterns, the degree of expectation to great success is raised to inside free from not knowing.

[0186] In addition, although this example took and explained the case where the indicator-chart design specially used for a pattern was made into the dumpling picture which has the same face picture to the example, it is good as for a method of carrying out a group division for every background image which has every character picture which has the same color or the same configuration, the same color, or the same configuration. For example, you may determine indicator-chart handles specially used for a pattern for every configuration, such as triangular konnyaku, a square light, puffy cake made of ground fish, and a Japanese radish of a round head, by using Japanese pot-au-feu as a motif.

[0187] As mentioned above, although the game machine of this invention was concretely explained based on the gestalt of operation, various deformation and application are possible for this invention in the range which is not limited to the gestalt of the above-mentioned implementation and does not deviate from the summary. For example, change and correction are arbitrarily possible for the block composition shown in drawing 3 - drawing 9 . Moreover, after it not only performs the production display which covers arbitrary portions other than a common element in identification information, but [after being in a reach state,] it considers as the pattern which had the pattern stopped to the beginning covered and the pattern of other viewing areas stops, you may make it cancel cover.

[0188] Moreover, it considers as the pattern which had the 2nd halt pattern covered after a halt of the 1st halt pattern, and may be made to direct whether it will be in a reach state. Furthermore, it is made to perform discernment of whether to go into probability upset condition, and discernment of the predetermined number of a time express mode by considering as great success, when it is what all patterns including the covered pattern stop, and contains a common element, and canceling a cover display after that.

[0189] In addition, although the gestalt of the above-mentioned implementation took and explained the case where the program and data for realizing this invention were stored in semiconductor memory, such as ROM, to the example, you may use the program and data for realizing this invention by storing in various storages. As media used as a record medium, you may be magnetic media like FD (Floppy Disk), HD (Hard Disk), and DAT (Digital Audio Tape), CD-ROM (Compact Disk Read Only Memory), an optical disk like PD (Phasechange Disk) and DVD (Digital Versatile Disk), and a magneto-optic disk like MO (Magneto Optical disk).

[0190] Moreover, the program and data for realizing this invention are not limited to the gestalt offered [which are offered and is distributed to a computer apparatus (game equipment is included)] by the record medium which can be detached and attach d freely, and may take the g stalt distributed by pre-installing in the semiconductor memory which a computer apparatus (game quipm nt is included)

has beforehand. Furthermore, the program and data for realizing this invention may take the gestalt distributed by downloading from other devices on the network connected through the communication line etc. by preparing the communications processing section.

[0191] And it is good also as a gestalt which performs directly the program and data which were downloaded not only through what is performed by equipping with the record medium which can also detach and attach the execution gestalt of a game freely but through the communication line etc. using the hardware resources by the side of other devices on the network connected through a gestalt, a communication line, etc. which are made into an execute permission by once storing in an internal memory etc. Furthermore, it can also consider as a gestalt which performs a game by exchanging data through other computer apparatus (game equipment being included) etc. and networks.

[0192]

[Effect of the Invention] As explained above, according to this invention, the production display which raises the degree of expectation which is becoming it a great success to a game person can be performed by devising the display mode after a reach state.

[Translation done.]

* NOTICES *

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is the front view of the pachinko game machine in the 1st example of this invention.
[Drawing 2] It is the rear view of the pachinko game machine in the 1st example of this invention.
[Drawing 3] It is the block diagram showing the example of a system configuration in a game control section.
[Drawing 4] It is drawing showing the sensor and switch which constitute the input

switch group of drawing 3 .

[Drawing 5] It is drawing showing each solenoid which constitutes the output solenoid group of drawing 3 .

[Drawing 6] It is the block diagram showing the example of a system configuration in the display-control section of drawing 3 .

[Drawing 7] It is the block diagram showing the example of a system configuration in the voice-control section of drawing 3 .

[Drawing 8] It is the block diagram showing the example of a system configuration in the awarded-balls control section of drawing 3 .

[Drawing 9] It is the block diagram showing the example of a system configuration in the information output section of drawing 3 .

[Drawing 10] It is the flow chart which shows the example of processing operation in a game control section.

[Drawing 11] It is the flow chart which shows the example [in / pattern process processing / usually] of processing shown in drawing 10 .

[Drawing 12] It is usually drawing corresponding to the value of the random number for patterns usually showing a pattern.

[Drawing 13] It is a timing chart for [in a normal pattern game] usually explaining the definite procedure of a pattern.

[Drawing 14] It is the flow chart which shows the example of processing in the special pattern process processing shown in drawing 10 .

[Drawing 15] It is drawing showing the special pattern corresponding to the value of the random number for patterns specially.

[Drawing 16] It is drawing showing the special pattern which added the cover object.

[Drawing 17] It is a timing chart for explaining the definite procedure of the special pattern in the ** view game which comes out reach operation nothing.

[Drawing 18] It is a timing chart for explaining the definite procedure of the special pattern in the ** view game in those with reach operation.

[Drawing 19] It is drawing showing the example of a display in pattern display specially when the partial-occlusion display in the 1st example of this invention is performed.

[Drawing 20] It is drawing showing the example of a display in pattern display specially when the partial-occlusion display in the 1st example of this invention following drawing 19 is performed.

[Drawing 21] It is drawing showing the example [in / pattern display / specially] of a display when the partial-occlusion display in the 1st modification is performed.

[Drawing 22] It is drawing which is replaced with drawing 21 and in which showing the example of a parts picture specially used for a pattern.

[Drawing 23] It is drawing which is replaced with drawing 22 and in which showing the example of a parts picture specially used for a pattern.

[Drawing 24] It is drawing which is replaced with drawing 23 and in which showing the example of a parts picture specially used for a pattern.

[Drawing 25] It is drawing showing the example of a display in pattern display specially when the partial-occlusion display in the 2nd modification is performed.
[Drawing 26] It is drawing showing the special pattern corresponding to the value of the random number for patterns specially.
[Drawing 27] It is drawing showing the example of a display in the special pattern display in the 2nd example of this invention.
[Description of Notations]
1 -- Pachinko Game Machine (Game Machine)
2 -- It is Usually Pattern Starting Gate.
2a-2d -- Normal pattern hold storage display
3 -- It is Usually Pattern Display.
3a-- It is usually a pattern viewing area.
4 -- Electric Tulip Type Accessory (Usually Electric Accessory)
5 -- It is Pattern Starting Mouth Specially.
5a-5d -- ** view hold storage display
6 -- It is Pattern Display Specially.
6a, 6b, 6c -- It is a pattern viewing area specially.
6g-- Expected-value gage
6x -- Expected-value gage viewing area
7 -- Large Winning-a-Prize Mouth (Specially Electric Accessory)
8 -- Large Winning-a-Prize ****
9 -- Specific Field
10 -- Game Board
13 -- Game Field
28 -- Out Mouth
30 -- Frame for Game Machines
41 -- Top Saucer Unit
51 -- Bottom Saucer Unit
55 -- Launcher
56 -- Launcher Handle
57 -- Discharge Lever
100 -- Power Supply Section
200 -- Game Control Section (Game Control Board)
201 -- Initial Reset Circuit
202 -- Fixed Reset Circuit
203 -- MCU for Game Control
204 -- Address Decoding Circuit
205 -- I/O Port
206 -- Switch Input Circuit
207 -- Solenoid Drive Circuit
208 -- It is Pattern Display Circuit Specially.
209 -- Light Emitting Diode Drive Circuit

210 -- Sound Output Circuit

211 -- Electric-Spectaculars Signal Circuit

212 -- Winning-a-Prize Data Signal Input Circuit

213 -- Awarded-Balls Number Signal Output Circuit

214 -- Information Output Circuit

300 -- Input Switch Group

301 -- It is Usually Pattern Starting Switch.

302 -- It is Pattern Starting Switch Specially.

303 -- Count Switch

304 -- Specific Field Switch

305 -- Winning-a-Prize Sphere Pilot Switch

400 -- Output Solenoid Group

401 -- It is Usually Solenoid for Electric Accessories.

402 -- Solenoid A for Large Winning-a-Prize Mouths

403 -- Solenoid B for Large Winning-a-Prize Mouths

500 -- Display-Control Section (Display-Control Substrate)

600 -- Voice-Control Section (Electric-Spectaculars Control Board)

700 -- Awarded-Balls Control Section (Awarded-Balls Substrate)

720 -- Touch Substrate

800 -- Information Output Section (Information Terminal Substrate)

900 -- Prepaid Card Unit

[Translation done.]
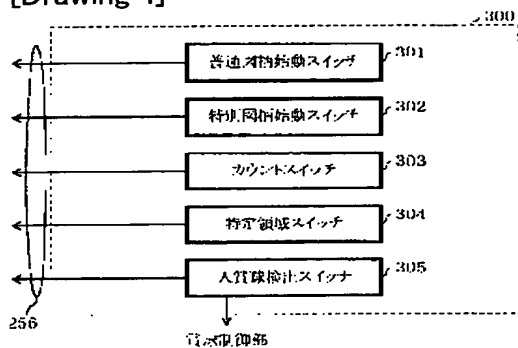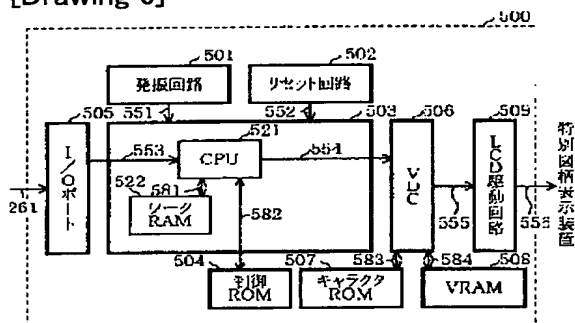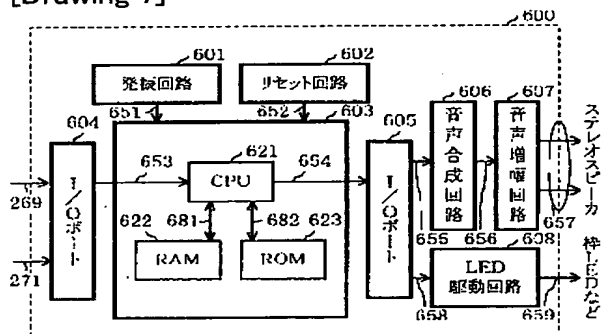

DRAWINGS

[Drawing 16]

(a)   (b)   (c)
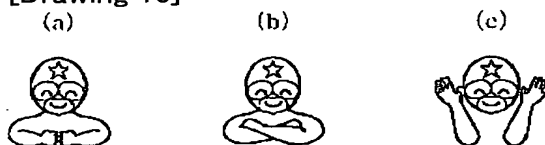
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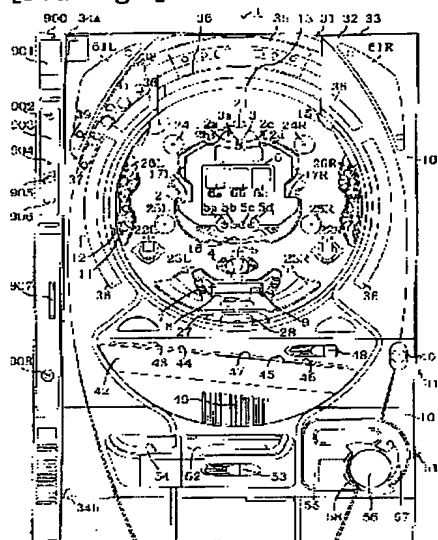
[Drawing 1]

[Drawing 5]
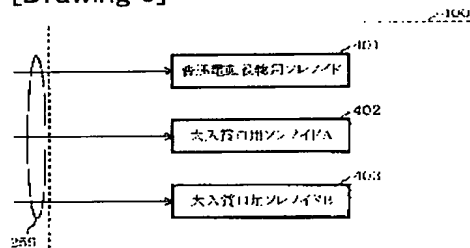
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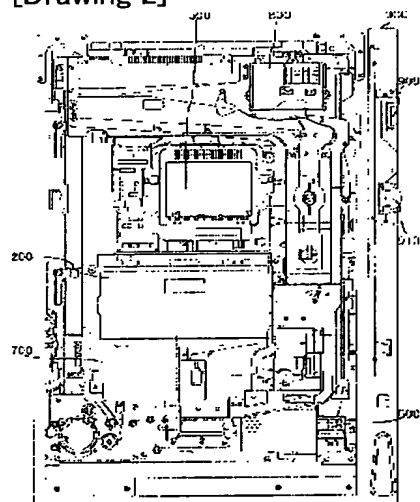
[Drawing 12]

導出図柄	伝送図柄
RF = "0"	*0*
RF = "1"	*1*
RF = "2"	*2*
RF = "3"	*3*
RF = "4"	*4*
RF = "5"	*5*

[Drawing 23]

[Drawing 24]

[Drawing 3]

[Drawing 4]

普通図柄始動スイッチ 301
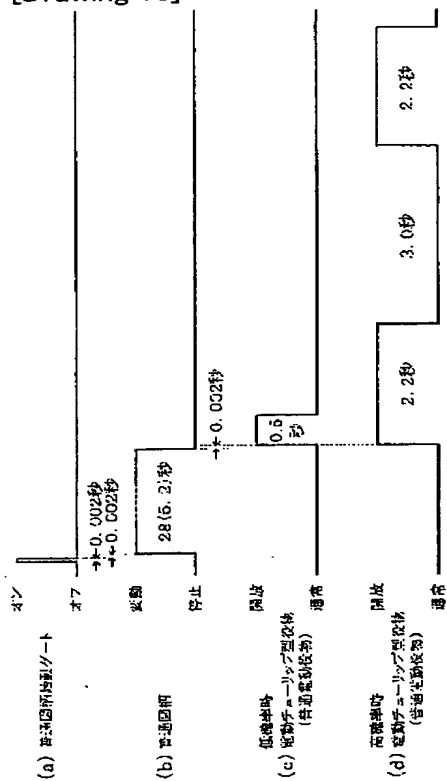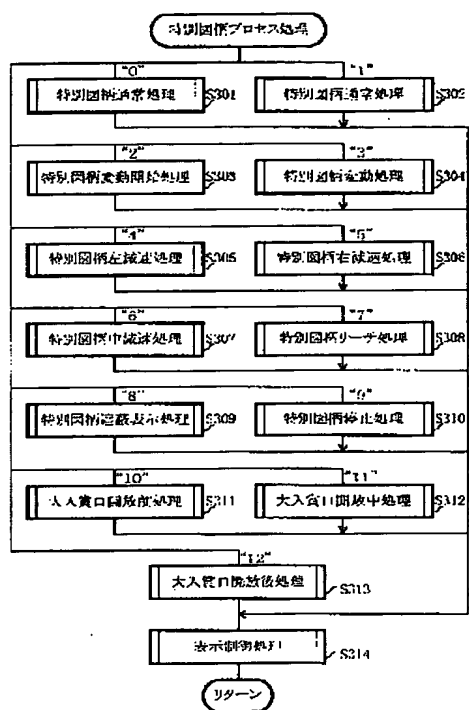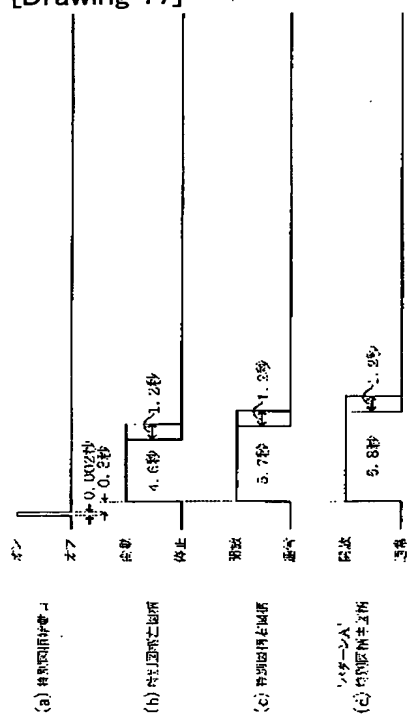特別図柄始動スイッチ 302
カウントスイッチ 303
特定領域スイッチ 304
入賞球検出スイッチ 305

256

賞球制御部

[Drawing 6]

500

発振回路 501
リセット回路 502

505 551 552 503 506 509 特別図柄表示装置

I/Oポート
553
CPU 521
554
VDC
LED駆動回路

261

522 581
ワークRAM
582

555 556

504 507 583 584 508

制御ROM
キャラクタROM
VRAM

[Drawing 7]

600

発振回路 601
リセット回路 602

604 651 652 603 605 606 607 ステレオスピーカ

I/Oポート
653
CPU 621
654
I/Oポート
音声合成回路
音声増幅回路

269

622 681 682 623

271

RAM
ROM

655 656 608 657

LED駆動回路
枠LEDなど

658 659

[Drawing 8]

700 入賞球検出スイッチ

発振回路 701
リセット回路 702

704 751 752 703 705 エラー表示器
球切れ検出器
満タン検出器
球払出検出器

753
CPU 721
754
I/Oポート
払出モータ
払出ソレノイド
賞球LED
球切れLED

272

722 781 782 723

275

ROM
RAM

I/Oポート

プリペイドカードユニット 900

720 タッチ基板
ハンドルタッチセンサ
単発発射スイッチ

[Drawing 9]

[Drawing 15]

特別図柄用乱数	特別図柄	特別図柄用乱数	特別図柄
RL, RC, RL - "0"		RL, RC, RL - "1"	
RL, RC, RL - "2"		RL, RC, RL - "3"	
RL, RC, RL - "4"		RL, RC, RL - "5"	
RL, RC, RL = "6"		RL, RC, RL - "7"	
RL, RC, RL - "8"		RL, RC, RL - "9"	
RL, RC, RL - "10"		RL, RC, RL - "11"	

[Drawing 10]

[Drawing 11]

普通図柄プロセス処理

"0" 普通図柄変動待ち処理 S201
"1" 普通図柄判定処理 S202

"2" 普通図柄変動処理 S203
"3" 普通図柄停止処理 S204

"1" 普通電動役物開放処理 S205

リターン

[Drawing 13]

0.002秒
0.002秒
28(6.2)秒
0.002秒
0.5秒
2.2秒
3.0秒
2.2秒

(a) 普通図柄始動ゲート オン／オフ
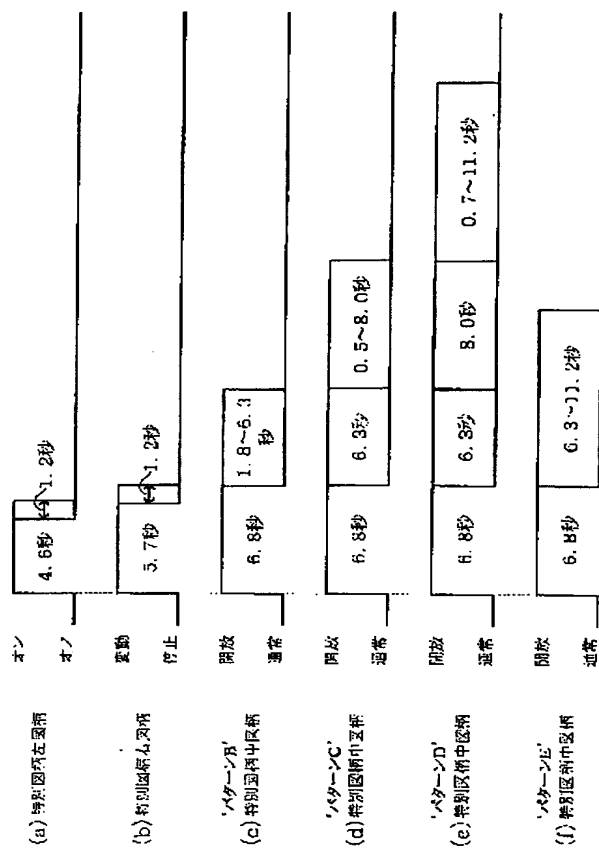(b) 普通図柄 変動／停止
(c) 低確率時 普電チューリップ型役物 (普通電動役物) 開放／閉鎖
(d) 高確率時 普電チューリップ型役物 (普通電動役物) 開放／閉鎖
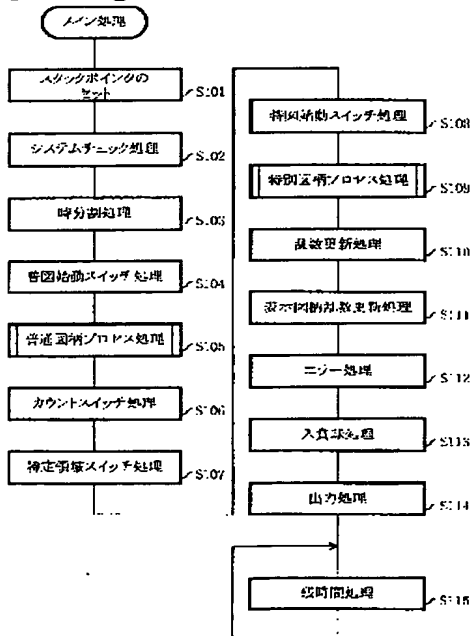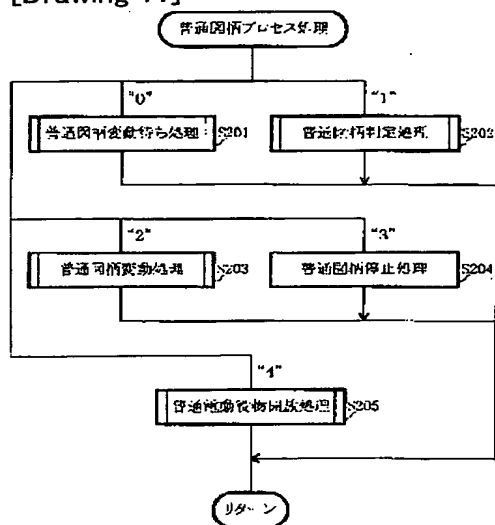
[Drawing 14]

[Drawing 17]

[Drawing 18]

（a）特別図柄左図柄　　オン／オン　　4.6秒　　0～1.2秒

（b）特別図柄中図柄　　変動／停止　　5.7秒　　0～1.2秒

（c）パターンB 特別図柄中区柄　　開放／通常　　6.8秒　　1.8～6.3秒

（d）パターンC 特別図柄中区柄　　開放／通常　　6.8秒　　6.3秒　　0.5～8.0秒

（e）パターンD 特別図柄中区柄　　開放／通常　　6.8秒　　6.3秒　　8.0秒　　0.7～11.2秒

（f）パターンE 特別図柄中区柄　　開放／通常　　6.8秒　　6.3～11.2秒

[Drawing 19]

（a）　6a　6b　6c
（b）　6a　6b　6c
（c）　6a　6b　6c
（d）　6a　6b　6c
（e）　6a　6b　6c
（f）　6a　6b　6c
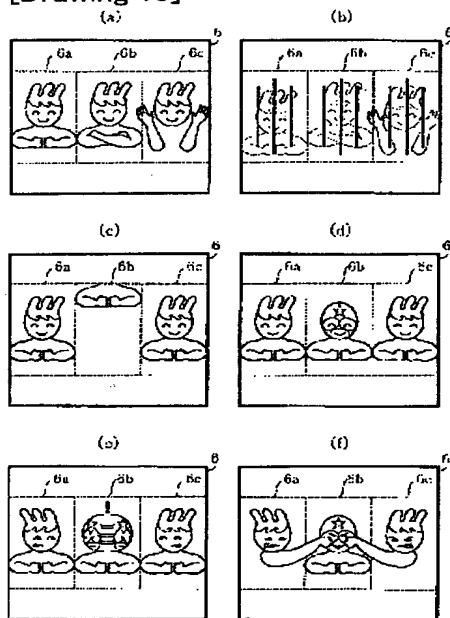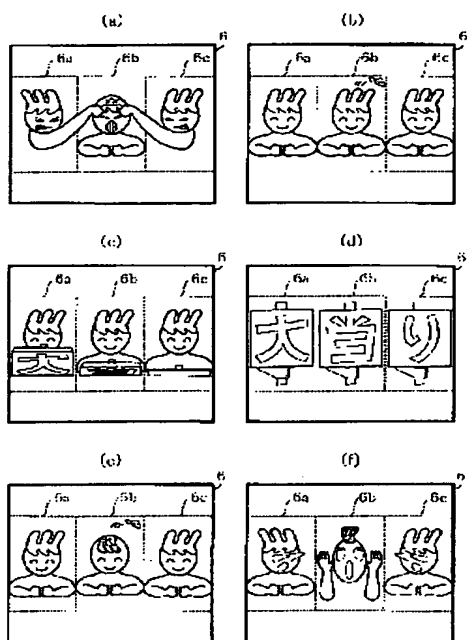
[Drawing 20]
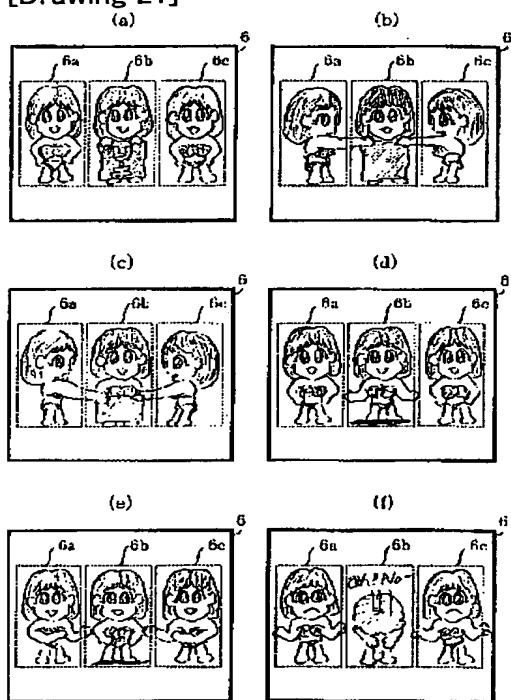
[Drawing 21]

[Drawing 25]
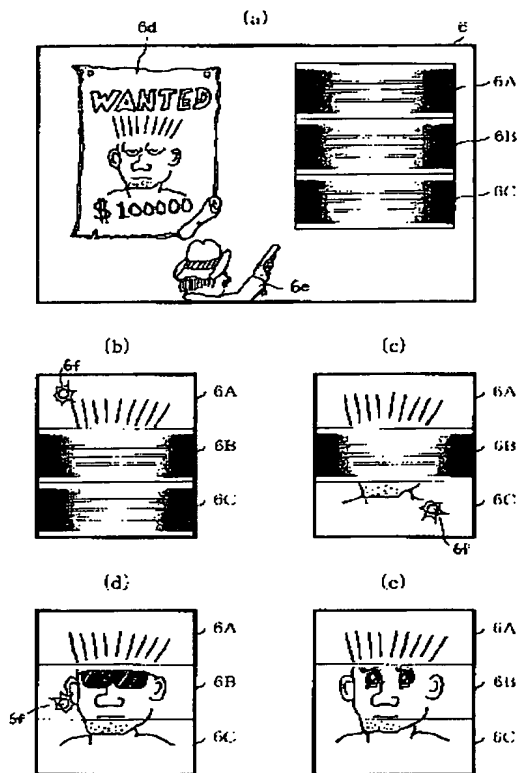
[Drawing 26]

特別図柄压乱数	特別区柄	特別図柄用乱数	特別図柄
RT, RM, RB = "0"	☺	RT, RM, RB = "1"	☺
RT, RM, RB = "2"	😠	RT, RM, RB = "3"	☺
RT, RM, RB = "4"	☺	RT, RM, RB = "5"	☺
RT, RM, RB = "6"	😠	RT, RM, RB = "7"	☺
RT, RM, RB = "8"	●	RT, RM, RB = "9"	●
RT, RM, RB = "10"	●	RT, RM, RB = "11"	●

[Drawing 27]

リーチ！

大当り

[Translation done.]